THR10

THR10 Management & Administration I

mySAP Human Resources

Date	
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Instructor Handbook

Course Version: 2006 Q2
Course Duration: 10 Day(s)
Material Number: 50080058
Owner: Jürgen Sengel (D035258)

An SAP Compass course - use it to learn, reference it for work

About This Handbook

This handbook is intended to complement the instructor-led presentation of this course, and serve as a source of reference. It is not suitable for self-study.

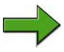
Typographic Conventions

American English is the standard used in this handbook. The following typographic conventions are also used.

Type Style	Description
Example text	Words or characters that appear on the screen. These include field names, screen titles, pushbuttons as well as menu names, paths, and options. Also used for cross-references to other documentation both internal (in this documentation) and external (in other locations, such as SAPNet).
Example text	Emphasized words or phrases in body text, titles of graphics, and tables
EXAMPLE TEXT	Names of elements in the system. These include report names, program names, transaction codes, table names, and individual key words of a programming language, when surrounded by body text, for example SELECT and INCLUDE.
`Example text`	Screen output. This includes file and directory names and their paths, messages, names of variables and parameters, and passages of the source text of a program.
`Example text`	Exact user entry. These are words and characters that you enter in the system exactly as they appear in the documentation.
`<Example text>`	Variable user entry. Pointed brackets indicate that you replace these words and characters with appropriate entries.

Icons in Body Text

The following icons are used in this handbook.

Icon	Meaning
	For more information, tips, or background
	Note or further explanation of previous point
	Exception or caution
	Procedures
	Indicates that the item is displayed in the instructor's presentation.

Contents

Course Overview

The Management/Administration in HCM I course (THR10) is the first classroom course in the SAP Consultant training track in HCM. After an initial introduction to the HCM module, you will learn about the most important functions in the areas of personnel administration and the enterprise structure. This includes an explanation of the basic scenarios, followed by hands-on practice in the system. Based on this information, the areas Time Management and HR Master Data are then covered. The course concludes with an explanation of the various reporting options within and outside of the mySAP HCM system.

Target Audience

This course is intended for the following audiences:

- Application consultants who are responsible for implementing Personnel Administration or Time Management with mySAP ERP HCM
- Application consultants who require knowledge of HR Master Data, Time Management, and Reporting.

Course Prerequisites

Required Knowledge

- Experience of Human Resources Management in a company
- E-Learning: ERP030, SAP120, ERP001

Course Duration Details

Unit 1: Essentials	
Logon/Navigation	20 Minutes
Exercise 1: Logon/Navigation	10 Minutes
Structures in HCM	50 Minutes
Organizational Management	50 Minutes
Exercise 2: Organizational Management	10 Minutes
Unit 2: Hiring an Employee	
Applicant Data	30 Minutes
Exercise 3: Applicant Data	10 Minutes
The E-Recruiting Solution	15 Minutes
Employee Data	90 Minutes
Exercise 4: Employee Data	10 Minutes
Time Data	60 Minutes
Employee Self-Service (ESS)	30 Minutes

Course Goals

This course will prepare you to:

- Explain the basic processes in Human Resources
- Configure HR Master Data and Personnel Administration to meet customer requirements
- Configure Time Management data to meet customer requirements
- Perform reporting for HCM data

Course Objectives

After completing this course, you will be able to:

- Explain the basic processes in Human Resources
- Configure HR Master Data and Personnel Administration to meet customer requirements
- Configure Time Management data to meet customer requirements
- Implement various procedures for reporting on HCM data

SAP Software Component Information

The information in this course pertains to the following SAP Software Components and releases:

- ECC 6.0
- R/3 4.7

The following lessons and exercises are optional and are not part of this course:

- Managing and Editing Projects

mySAP ECC 6.0

Unit 1

1

Essentials

For more information, see the Instructor Guide in SAPNet.

Unit Overview

- Logging On / Navigation
- Structures in HCM
- Organizational Management

Unit Objectives

After completing this unit, you will be able to:

- Navigate as a user in the mySAP ERP system
- Describe the structures in HCM
- Explain the organizational plan

Unit Contents

Lesson: Logon/Navigation

2

Lesson Duration: 20 Minutes

Lesson Overview

In this lesson, you learn how to navigate in the mySAP ERP system.

Lesson Objectives

After completing this lesson, you will be able to:

- Navigate as a user in the mySAP ERP system

For more information, see the Instructor Guide in SAPNet.

Business Example

Part A - Logging On / Navigation

- As a user, familiarize yourself with the navigation in the system

Content

Unit 1: Essentials
Lesson Logon/Navigation
Lesson Structures in HCM
Lesson Organizational Management

Unit 2: Hiring an Employee
Lesson Applicant Data
Lesson Employee Data
Lesson Time Data

Unit 3: Training and Education
Lesson Profile Matchups
Lesson Course Registration
Lesson Appraisals

Unit 4: Remuneration Adjustment
Lesson Enterprise Compensation Management
Lesson Payroll
Lesson Personnel Cost Planning

Unit 5: Reporting
Lesson Reporting

Figure 1: Content

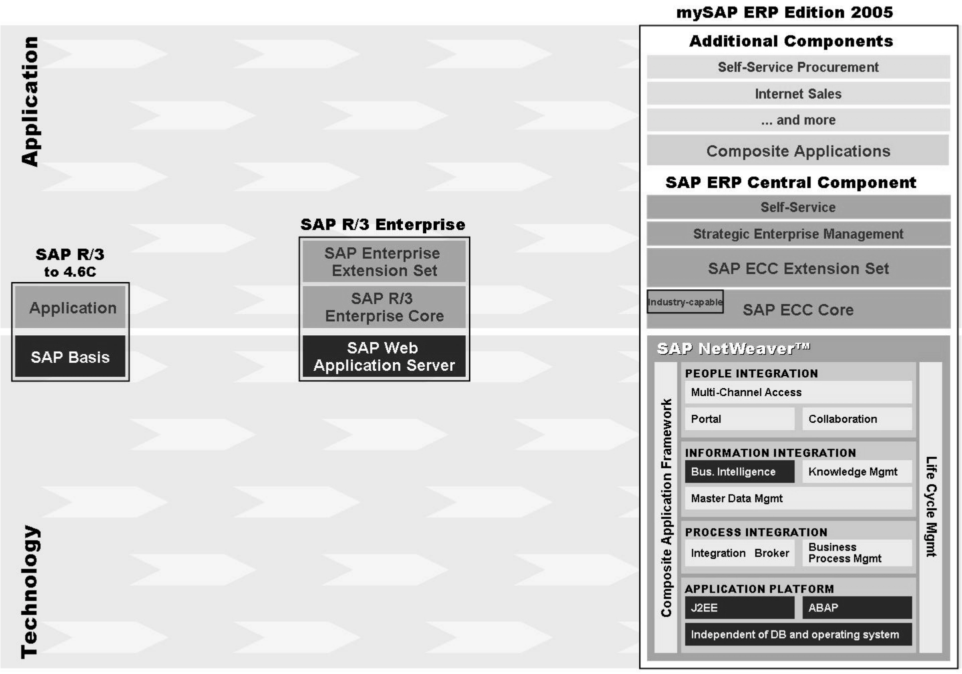


Figure 2: mySAP ERP Architecture

mySAP Enterprise Resource Planning (mySAP ERP) - Human Capital Management

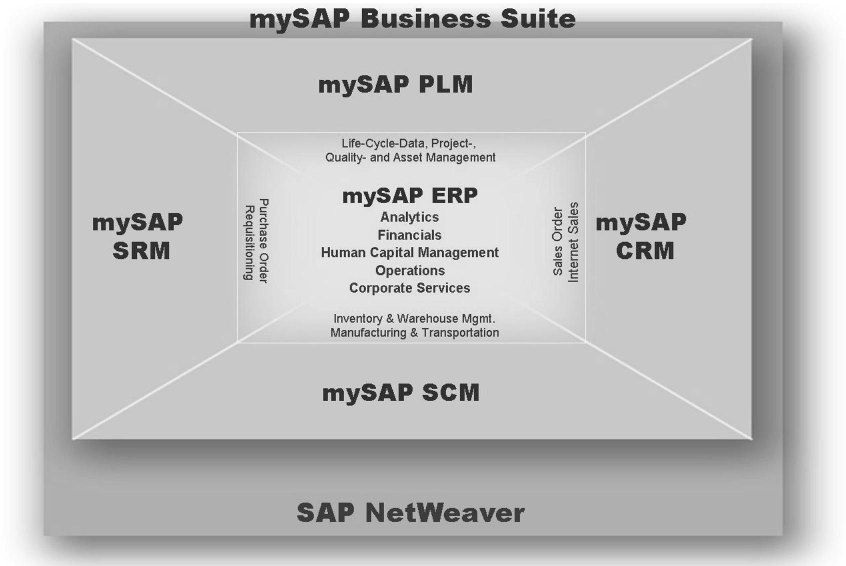


Figure 3: mySAP ERP as part of the mySAP Business Suite

mySAP ERP is a component of the mySAP Business Suite. The technical basis for all solutions is SAP NetWeaver.

One part of mySAP ERP is the area of Human Capital Management.

Figure 4: Human Capital Management: Solutions

Human Capital Management (HCM) is a company-wide strategy and is not only confined to HR processes and functions.

HCM is subdivided into:

- Talent Management: This area represents the employee's entire time at the company. The time of employment or the employee lifecycle can usually be divided into four phases: recruitment/hiring, assignment, development, retention at company. The HCM solutions should automate and optimize these four phases. The solutions improve the hiring process, make personnel planning more efficient, promote employee development, and improve employee retention at the company (each phase is discussed in more detail later).
- Workforce Process Management: Payroll, Benefits, Time Management, and so on, offer a wide range of functions with low operating costs.
- Workforce Analytics: Reporting on the dataset using, for example, BW, SEM.
- End-User Enablement: Cross-company relationships between employees, managers, contractors, and the company itself mean greater value-added gain. This is achieved, for instance, through the portal-based components, such as ESS and MSS.

HCM solutions use technology to define, identify, use, and enhance your company's human capital. Your company profits from a large value-added potential and the company's bottom line can be improved.

Logging On to the System

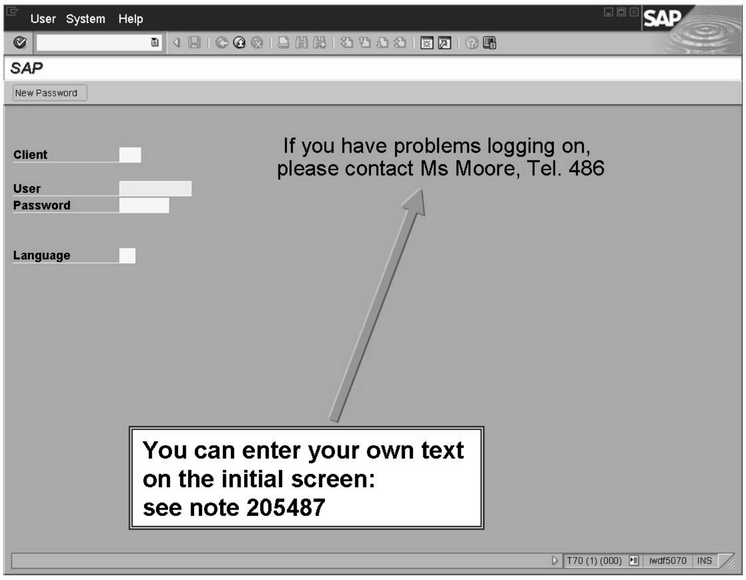


Figure 5: Logging On to the System

SAP systems are **client systems**. The client concept enables the parallel operation, in one system, of several enterprises that are independent of each other in business terms.

A **client** is, in organizational terms, an independent unit in the system. Each client has its own data environment and therefore its own master data, transaction data, and assigned user master records.

For a user to log on to the system, a master record must exist in the system for that user, referring to the relevant client. To protect access, a password is required for logon. The password entry is masked ("with asterisks").

SAP systems are available in several languages. You can select the logon language for each session using the *Language* field.

Multiple logons are always logged in the system. This is for security as well as licensing reasons. A warning message appears if the same user attempts to log on more than once. The message offers three options:

- Continue with the current logon and end any other session(s) of the same user in the system.
- Continue with the logon without ending other sessions in the system (logged in system)
- Terminate current logon attempt

Figure 6: SAP Easy Access - Standard

SAP Easy Access is the standard entry screen in the system. You navigate through the system using a compact tree structure.

You can include an image on the right-hand side, such as your company logo. This image can only be entered system-wide and is a cross-client setting. If you have the appropriate authorization, you can find a detailed description of the necessary settings by choosing *Extras → Administration Information*. You can prevent this image being displayed by switching it off under *Extras → Settings*.

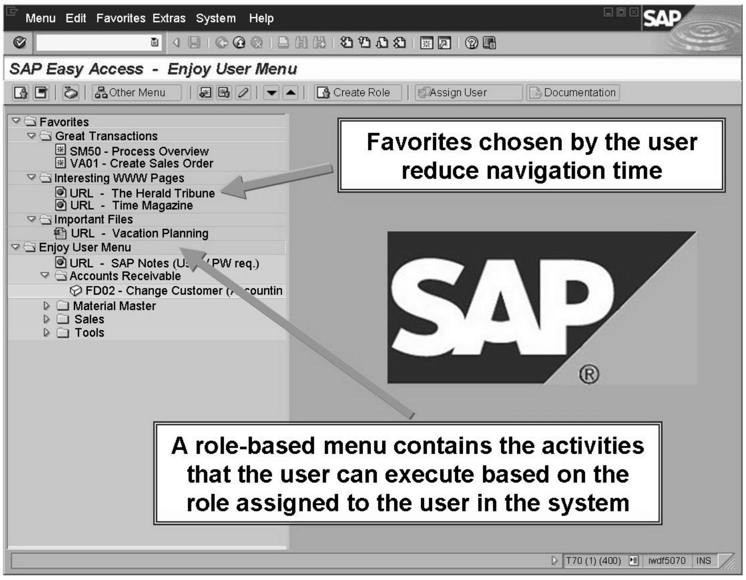


Figure 7: Role-Based User Menu

A **role** describes a set of logically linked activities in the system. These represent the range of functions users typically need for their work.

Roles must be set up so that the SAP system user can work with **user-specific** or **position-related** menus.

The authorizations for the activities listed in the menus are also assigned to the users using roles.

Once a user has been assigned a role, he or she can choose between the user menu or the “SAP standard menu”.

The above screen shows a user's role-based user menu with the name “Enjoy”. You can find roles that are supplied in the standard SAP system by choosing *Other Menu* on the *SAP Easy Access* initial screen.

Every end user can personalize the initial screen using Favorites. You can create your own **Favorites** list containing the transactions, reports, files, and Web addresses that you use most often.

You can add favorites either by choosing *Favorites* or by using the mouse to “drag & drop” items into the Favorites directory.

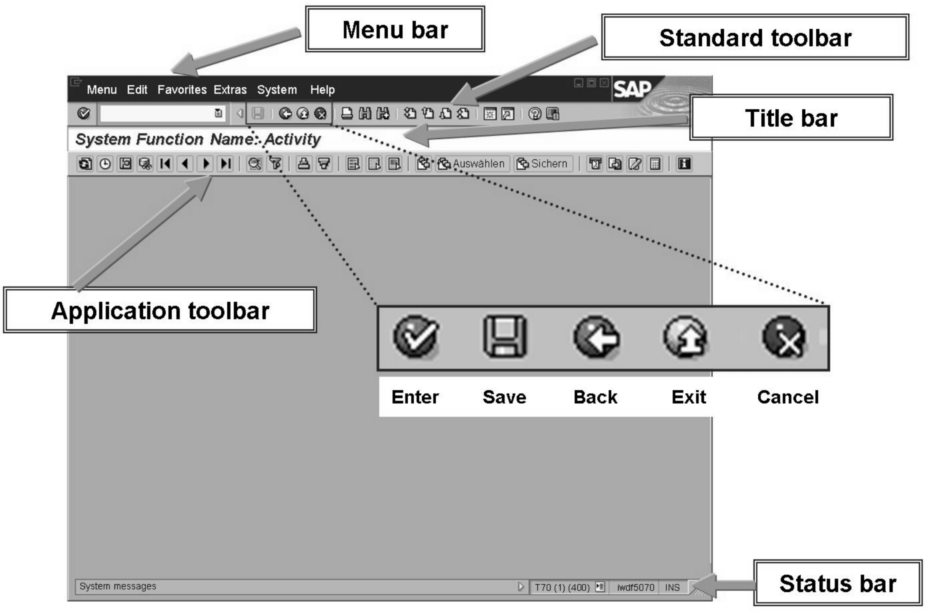


Figure 8: Screen Elements

Menu Bar: The menus shown here depend on which application you are working in. These menus contain cascading menu options.

Standard toolbar: The icons in the standard toolbar are available on all mySAP ERP screens. Any icons that you cannot use on a particular screen are grayed out. If you leave the cursor on an icon for a moment, a QuickInfo appears with the name or function of that icon. You will also see the corresponding function key settings.

Title bar: Displays the function that is available.

The **application toolbar** display icons which are available in the current application.

Status bar: Displays information on the current system status, for example, warnings or errors.

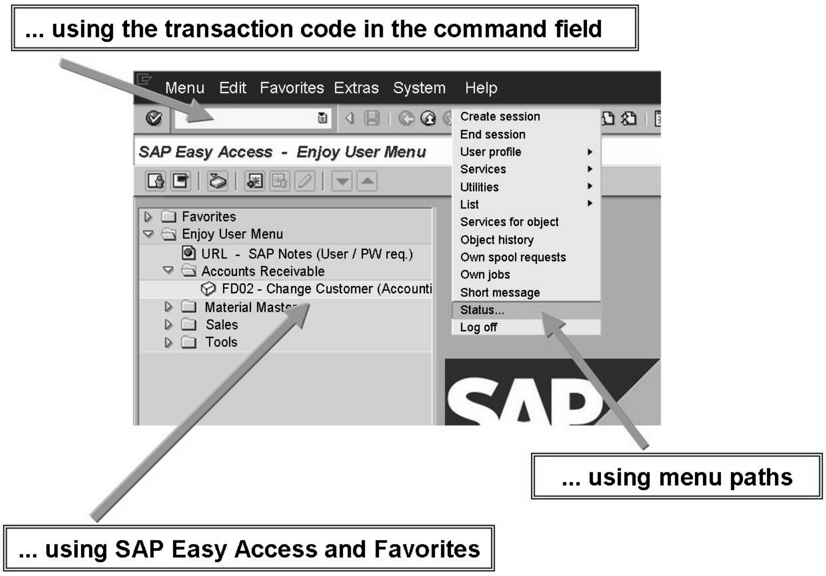


Figure 9: Selecting Functions

You can call system functions in the following ways:

- Use the mouse to choose:
  - Menu options
  - Favorites
  - SAP Easy Access options
- By entering a **transaction code in the command field**:

  Every function (not every screen) in the SAP system is a transaction code (T Code). You can access the assigned transaction code from any screen in the system. You can find the transaction code for the function you are working in at the moment by choosing *Status* under the *System* menu option. Other possible entries:

  - "/n" ends the current transaction.
  - "/i" ends the current session.
  - "/osm04" opens a new session and goes to the specified transaction (SM04).
- If you enter "**search_sap_menu**" in the command field, you can search for and display the menu paths for SAP transactions. You can also search for text strings.

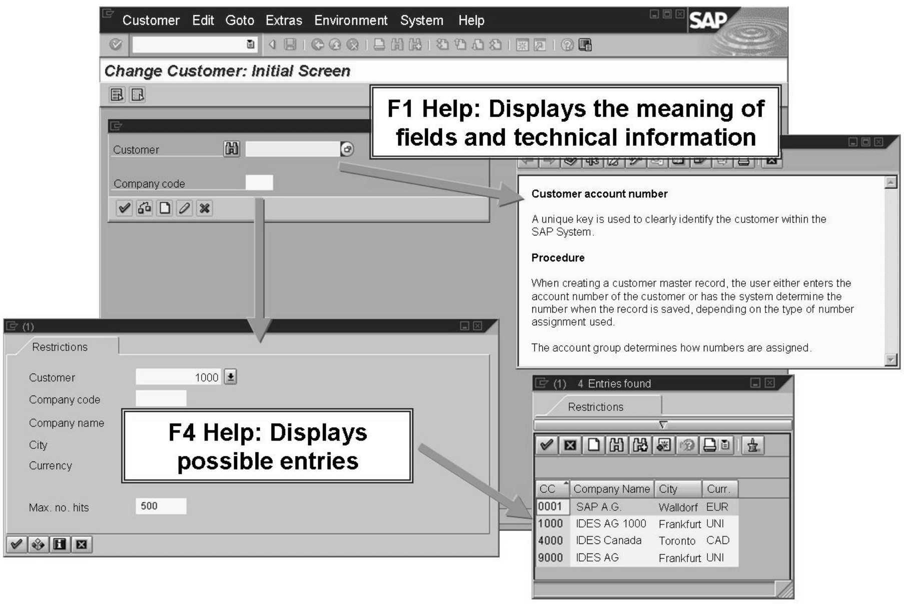


Figure 10: Field Help: F1; F4

For information on fields, menus, and messages, press **F1**.

For information on what values you can enter, press **F4**. You can also access F4 help for a selected field using the button immediately to the right of that field.

The *System* menu includes, **among others**, the following options:

- Create/End Session: This allows you to create and end sessions. The maximum number of sessions can be determined by the system administrator.
- User profile: This is where you enter user-specific settings. For example, you can use parameter IDs under *Own Data* to set default values for specific user-dependent fields in the system (for example, the company code field).
- Status: Displays the most important user and system data.
- Log off: Ends the mySAP ERP session with a confirmation prompt.

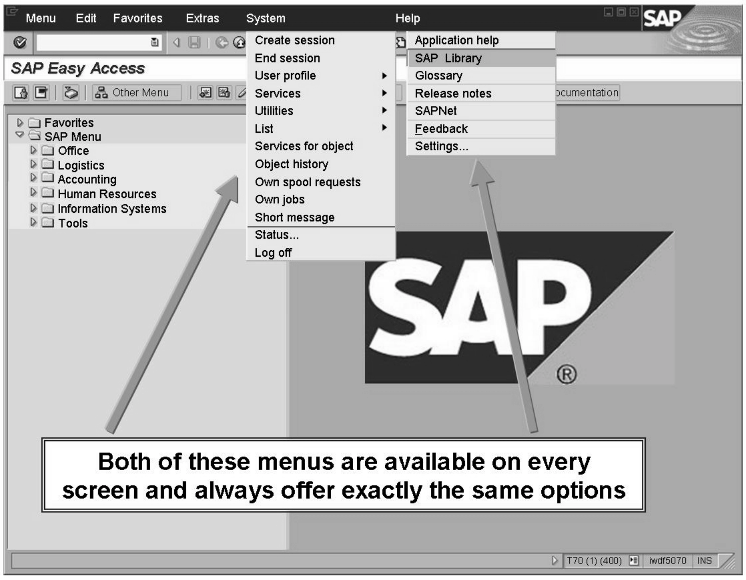


Figure 11: Menus: System and Help

The *Help* menu includes, **among others**, the following options:

- Context-sensitive *Application Help*
- Access to the *SAP Library*
- A glossary

SAP systems provide comprehensive online help. You can access the help from any screen in the system. You can always request help using the *Help* menu or the relevant icon (yellow question mark).

The SAP Service Marketplace also offers fast and user-friendly access to the SAP Library.

You can also access the Help Portal directly at http://help.sap.com.

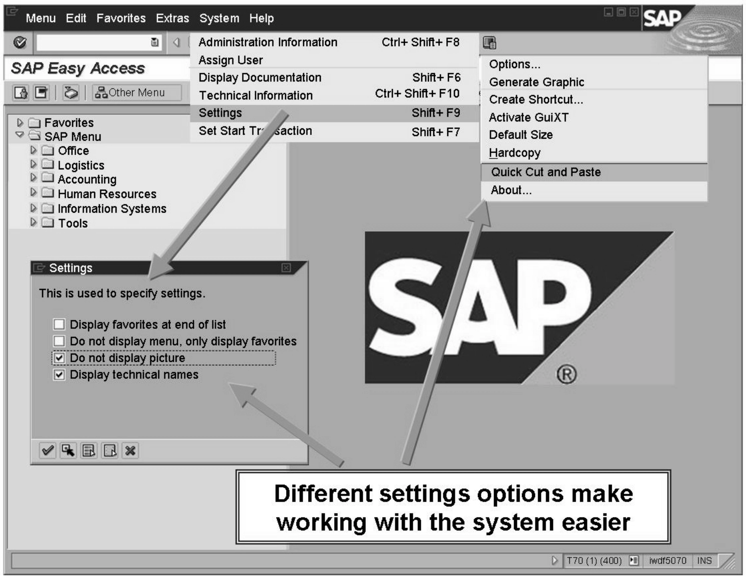


Figure 12: User-Specific Personalization

The end user has many possibilities for personalizing the system. Some are described below:

- Under *Extras → Settings* you can determine the layout of your initial screen. For example, you can switch off the image display on the right screen or switch on display of the technical names (transaction codes) in the SAP Easy Access Menu.
- Under *Options*, for example, you have the option of activating a quick cut and paste. Under *Options*, you can change the reaction speed of the QuickInfo that is displayed when the cursor hovers over an icon or when you “push a button”.
- You can set your own default values under *System → User Defaults → Own Data*. To do so, choose the tabs *Address, Defaults* and *Parameters*. The *parameter* setting is explained here as an example:

  Parameters: You can specify defaults for frequently used input fields here. In order to be able to set a default value for a field, it must be assigned a parameter ID. **Procedure for finding the parameter:** Go to the field for which you want to set a default value. Press F1, then choose “Technical Info”. The system displays an information window that contains the relevant “Parameter ID” under the heading “Field Data” (if the field has been assigned a parameter ID).

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Exercise 1: Logon/Navigation

Exercise Duration: 10 Minutes

Exercise Objectives

After completing this exercise, you will be able to:

- Log on to an SAP system

Business Example

Your employees' data changes over time. These changes must be reflected in the Human Capital Management system.

Task 1:

Your instructor will give you the data required to log on to the training system.

System:	________
Client:	________
User:	________
Password:	________

Task 2:

The help functions of mySAP ERP are available to answer any questions that may occur while you are working in the system.

1.

Hint: To be able to answer the following questions you must call the transaction "*Display HR Master Data*".

Use the *personnel number*:

111991## (## = group number)

On the "*Core Employee Info*" tab page, select the "*Organizational Assignment*" infotype and choose *Display*.

2. What is the purpose of the *personnel number* field? (Press F1 help for the *Personnel Number* field.)

   ____

3. Which business area does the company code come from?

Continued on next page

(Use the F1 help in the *Company Code* field and click on the link in the *Performance Assistant*.)

____

4. What is the name of the personnel area identified with the key *5000*?

   (Use the F4 help in the Personnel Area field.)

   ____

Solution 1: Logon/Navigation

Task 1:

Your instructor will give you the data required to log on to the training system.

System:	________
Client:	________
User:	________
Password:	________

Task 2:

The help functions of mySAP ERP are available to answer any questions that may occur while you are working in the system.

1.

Hint: To be able to answer the following questions you must call the transaction "*Display HR Master Data*".

Use the *personnel number*:

111991## (## = group number)

On the "*Core Employee Info*" tab page, select the "*Organizational Assignment*" infotype and choose *Display*.

a) In the Easy Access menu, choose *Human Resources* → *Personnel Management* → *Administration* → *HR Master Data* → *Display*.

b) In the *Personnel Number* field, enter the value **111991##**.

c) Select the tab page *Core Employee Info* and select the *Organizational Assignment* infotype. You select an infotype by clicking on the box to the left of the infotype name.

d) In the application toolbar, choose *Display*.

2. What is the purpose of the *personnel number* field? (Press F1 help for the *Personnel Number* field.)

____

a) Click in the *Personnel No.* field and then press F1.

b) The personnel number is the unique key for a person in one client.

3. Which business area does the company code come from?

Continued on next page

(Use the F1 help in the *Company Code* field and click on the link in the *Performance Assistant*.)

____

a) Click in the *Company Code* field and then press F1. Click on the word *company code* that is written in blue. The company code comes from Financial Accounting.

4. What is the name of the personnel area identified with the key *5000*?

   (Use the F4 help in the Personnel Area field.)

   ____

   a) Click in the *Personnel Area* field and then press*F4*.

   b) Personnel area *5000* is for *Japan*.

Lesson Summary

You should now be able to:

- Navigate as a user in the mySAP ERP system

Lesson: Structures in HCM

18

Lesson Duration: 50 Minutes

Lesson Overview

In this lesson, you learn how to describe the structures in HCM.

Lesson Objectives

After completing this lesson, you will be able to:

- Describe the structures in HCM

For more information, see the Instructor Guide in SAPNet.

Business Example

Part B - Structures in HCM

- Gain an overview of how your company's structures are represented in the system

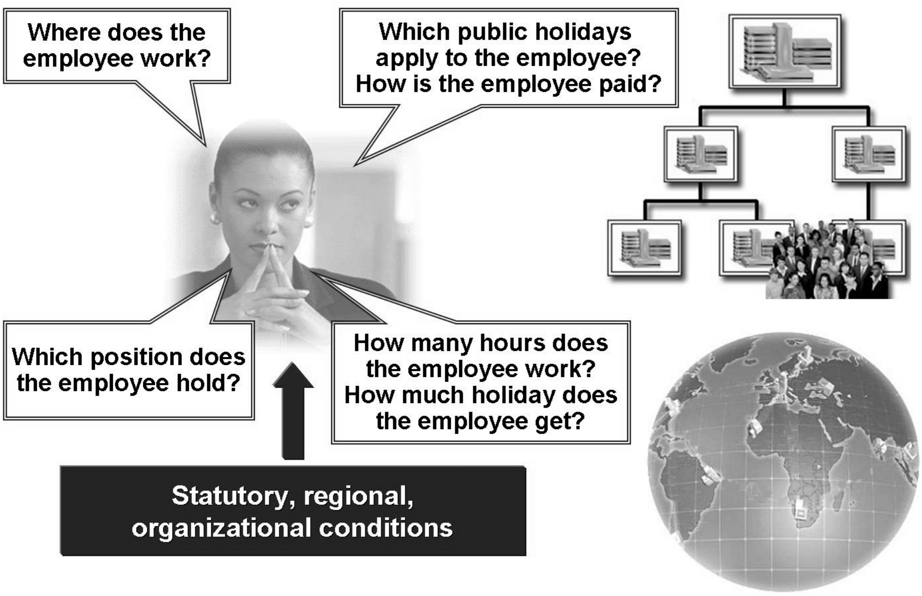


Figure 13: Employees

A Human Capital Management system enables you to set up organizational hierarchies and employee relationships and then store and administer employee data in the system.

You must be able to evaluate and report employee data flexibly and from all enterprise-specific organizational aspects.

Every employee is included in the structure of his or her enterprise. Data entry is restricted as the validity of all employee data is checked.

The structures of an enterprise are subdivided into organizational structures, based on an organizational plan, and administrative structures, based on the enterprise and personnel structures.

An organizational plan provides you with a complete model of the structural and personnel environment of your enterprise. Hierarchies and report structures are clearly laid out. The organizational plan is the foundation of Organizational Management. The organizational plan uses elements, called objects. The most important objects are organizational units, jobs, and positions.

The enterprise and personnel structures subdivide organizations and employees according to factors relevant to time management and payroll. These structures are stored in Customizing.

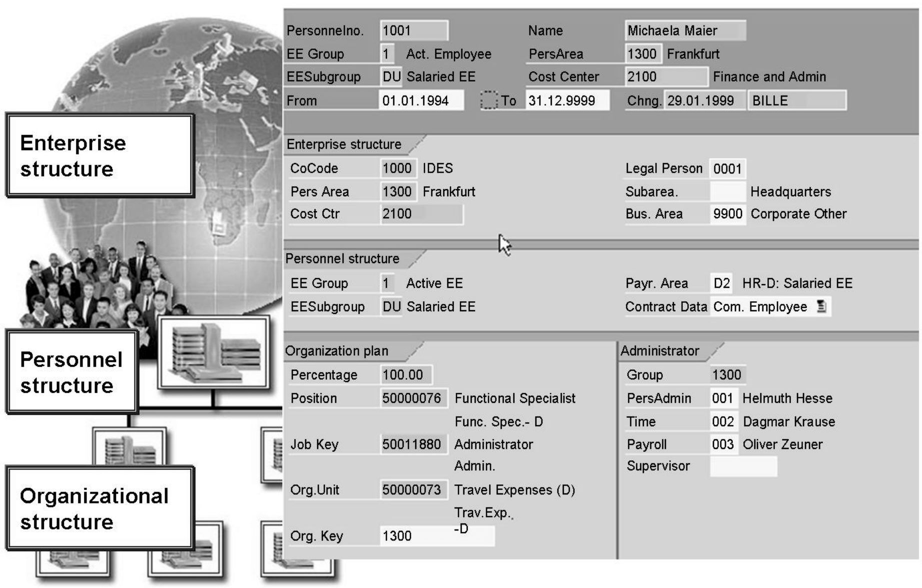


Figure 14: Organizational, Enterprise, and Personnel Structure

The allocation of employees to the structures in their enterprise is of the utmost importance in Human Resources. It is the first step in entering personal data.

You assign employees in infotype 0001, **Organizational Assignment**. In doing this, you include employees in the enterprise, personnel and organizational structures.

Information on the organizational assignment of employees is of great importance for authorization checks, for the entry of additional data, and for Time Management and Payroll Accounting.

When you enter data for an employee in infotype 0001, **Organizational Assignment**, the employee is assigned, for example, to a company code, a personnel area, and a payroll area. You also assign employees to positions. This results in the employee‘s assignment to an organizational unit, a job, and a cost center.

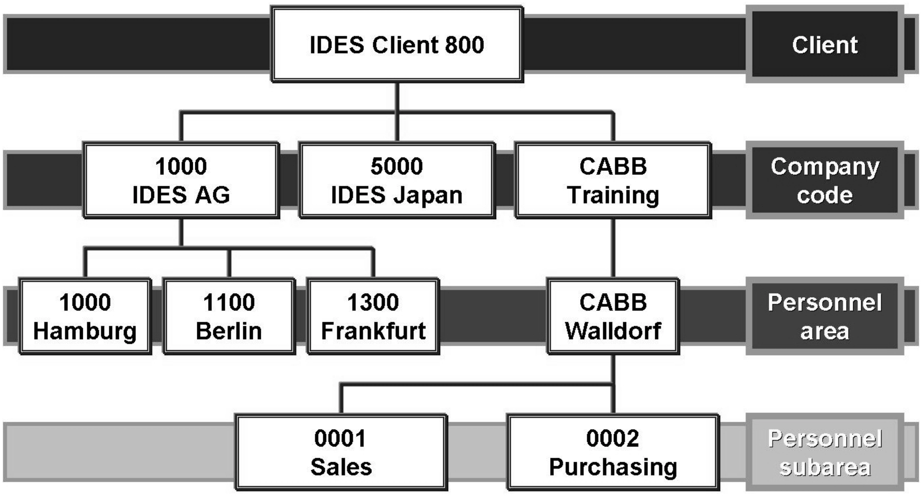


Figure 15: Enterprise Structure: Example

The enterprise structure for personnel administration is determined by the following elements:

- Client
- Company code
- Personnel area
- Personnel subarea

A client can either be valid for a company code at the smallest level, or for the entire corporate group. The company code is defined in accounting. Legally required financial statements such as balance sheets and profit and loss statements are created at the company code level. The personnel area is used exclusively in Personnel Administration and is unique within a client. Each personnel area must be assigned to a company code. The final element of the company structure, also unique to Personnel Administration, is the personnel subarea. Groupings are defined for personnel subareas to specify which entries from subsequent settings can be used for employees assigned to a particular company code or personnel area. These groupings directly or indirectly affect Time Management and Payroll.

The client is an independent legal and organizational unit of the system (group, for example).

The company code is an independent company with its own accounting unit - a company which draws up its own balance sheets.

A personnel area is an organizational unit in Personnel Administration. It represents a subdivision of the company code.

Personnel subareas are subdivisions of personnel areas. The organization of the most important subareas of personnel administration takes place at this level.

Figure 16: Definitions

In legal and organizational terms, the client is a self-contained unit within the system. You should consider the following points before you decide whether or not to set up a client:

- There is usually no exchange of data between clients.
- If an employee changes clients, you have to create the personnel number again.

The company code is a self-contained unit in legal terms, for which you can draw up a complete set of accounts. The company code is the highest level of the company structure.

A personnel area is assigned to a company code in Personnel Administration. The individual personnel areas in a company code have four-digit alphanumeric identifiers. The personnel areas within a client must be clear.

Personnel subareas represent a further subdivision of the personnel area. The principal organizational aspects of human resources are controlled at this level, namely the pay scale and wage type structures and the planning of work schedules. The personnel subarea is assigned a four-character alphanumeric identifier. The control features are stored according to the country.

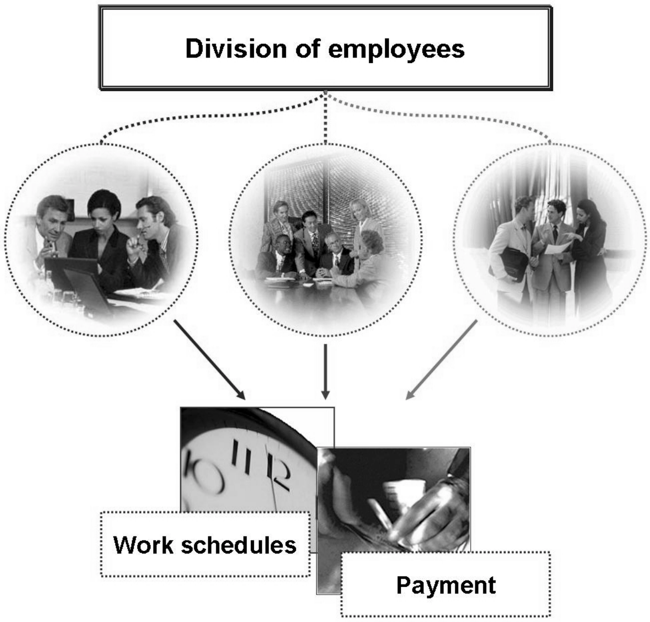


Figure 17: Personnel Structure

For administrative purposes, the employees in an enterprise are divided into two levels.

The highest level is an employee group, the second, an employee subgroup.

These levels are subject to authorization checks, to define remuneration levels or different work schedules, for example.

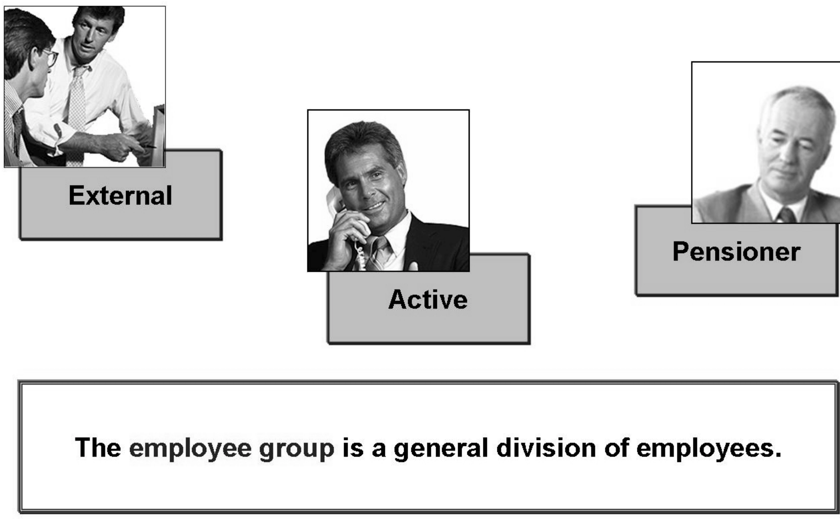


Figure 18: Employee Group

The employee group is a general division of employees. The employee group defines the relationship between an employee and a company in that the employee makes a certain contribution to the company in terms of work. Active employees, pensioners and early retirees make up the main employee groups in Personnel Administration.

The following are the principal functions of the employee group:

- Default values can be generated for the payroll accounting area or for basic pay, for example, according to employee group.
- The employee group is used as a selection criterion for reporting.
- The employee group is one unit of the authorization check.

You can usually use the standard catalog to set up employee groups. However, it can also be extended to suit individual customer requirements.

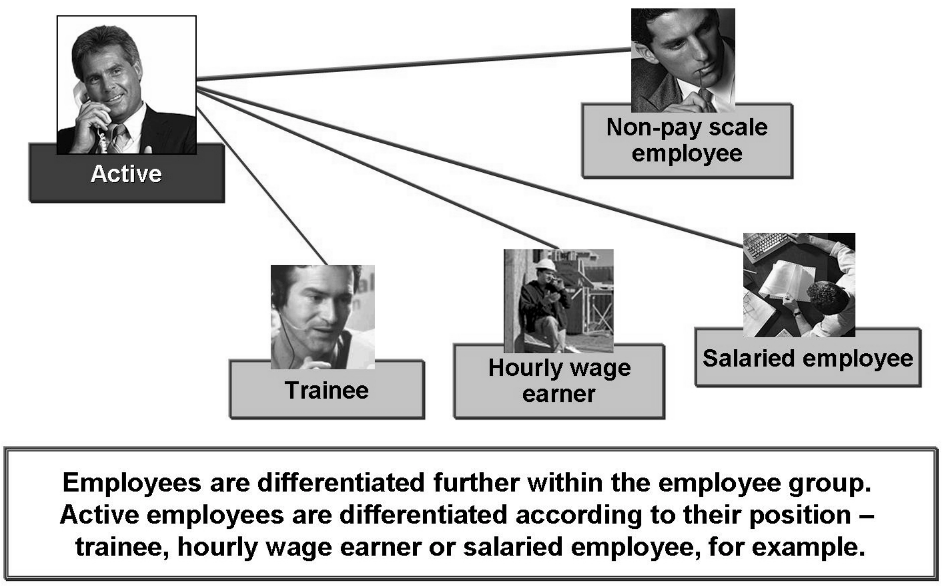


Figure 19: Employee Subgroup

The employee subgroup is a fine division of employee groups according to the position of employees. Wage earners, salaried employees and non-pay scale employees are all examples of subgroups within the "active" employee group.

All control features of the personnel structure are defined at employee subgroup level. The most important features are described below:

- The employee subgroup grouping for the Personnel Calculation Rule allows you to define different payroll procedures for different employee subgroups; for example, you can specify whether an employee's pay should be accounted on an hourly or monthly basis.
- The employee subgroup grouping for primary wage types controls the validity of wage types on an employee subgroup level, whereas the grouping for collective agreement provisions restricts the validity of pay scale groups to certain employee groups.
- When entering data, you can define default values using the employee subgroup, for example, for the payroll accounting area.

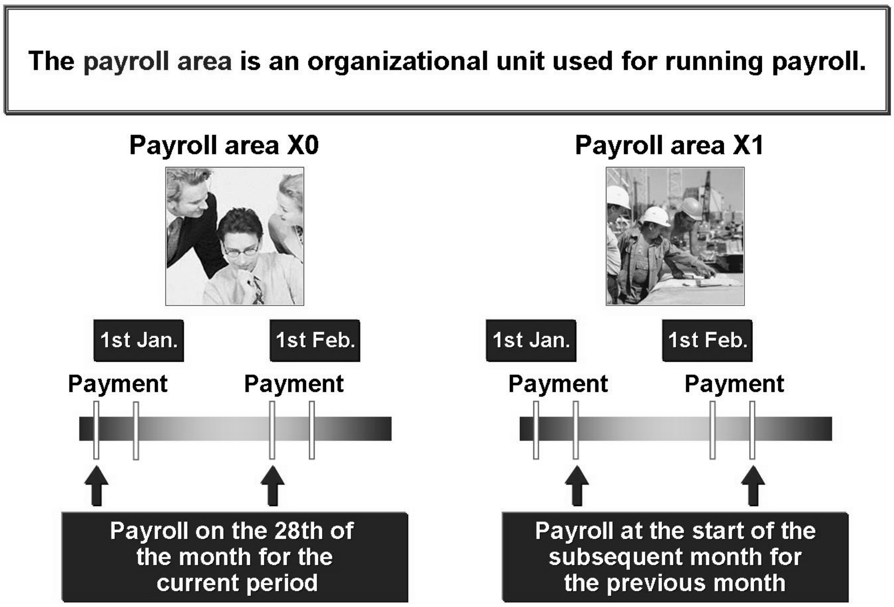


Figure 20: Payroll Accounting Areas

The **payroll area** represents an organizational unit used for running payroll. All employees who have payroll run for them at the same time and for the same period are assigned to the same payroll area.

Payroll accounting is generally performed for each payroll accounting area. The payroll accounting area provides the payroll driver with two pieces of information: the number of employees to be accounted and the dates of the payroll period.

The number of employees to be accounted is determined using the Organizational Assignment infotype (0001) which stores the payroll accounting area.

Hint: An employee may only change payroll accounting areas at the end of a period. If an employee changes status from wage earner to salaried employee in the middle of the month, and the payroll area is different for both, you should not enter the new payroll area until the start of the following month.

You can find further information about payroll in the unit on remuneration adjustments.

Facilitated Discussion

Discussion Questions

Use the following questions to engage the participants in the discussion. Feel free to use your own additional questions.

Lesson Summary

You should now be able to:

- Describe the structures in HCM

Lesson: Organizational Management

27

Lesson Duration: 50 Minutes

Lesson Overview

In this lesson, you learn about the organizational plan.

Lesson Objectives

After completing this lesson, you will be able to:

- Explain the organizational plan

For more information, see the Instructor Guide in SAPNet.

Business Example

Part C - Organizational Management

- Add organizational units and positions to an existing organizational structure.

An organizational plan provides a model of the structural and personnel environment at your enterprise.

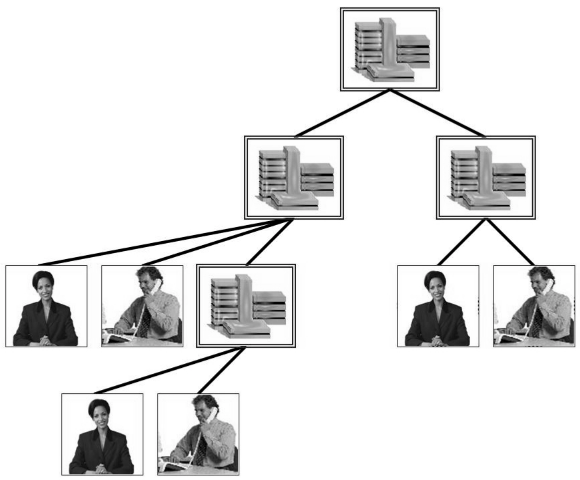


Figure 21: Organizational Plan

You create your organizational plan using organizational units and positions. An organizational plan is a comprehensive and dynamic model of the structural and personnel environment in your enterprise, which you can evaluate at any time.

You depict hierarchies within your organizational plan:

- Your company organizational structure

  The organizational structure depicts the hierarchy that exists between the various organizational units in your enterprise. You create the organizational structure by creating and maintaining organizational units and relating them with one another.

- The individual positions and the reporting structure (chain of command)

  An organizatinal plan maps the line structure in your company. You create an organizational plan by creating and maintaining positions and relating these with one another.

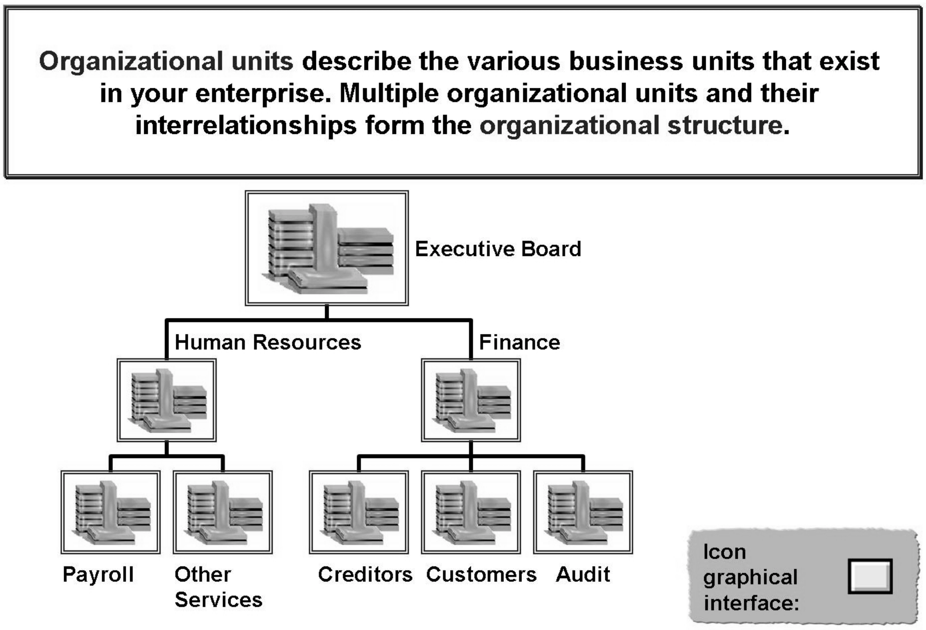


Figure 22: Object Types: Organizational Units

Organizational units can be classified generally (for example, by function or by region), or specifically (by project group, for example). The way in which organizational units are classified will depend on the company in question.

You must relate organizational units with one another in an organizational plan. The hierarchical interrelationships that exist between the organizational units represents the organizational structure of your enterprise.

Organizational units can be linked to cost centers from Accounting.

Example:

The above example shows the organizational unit Executive Board as the superior object over two subordinate objects, Human Resources and Finance.

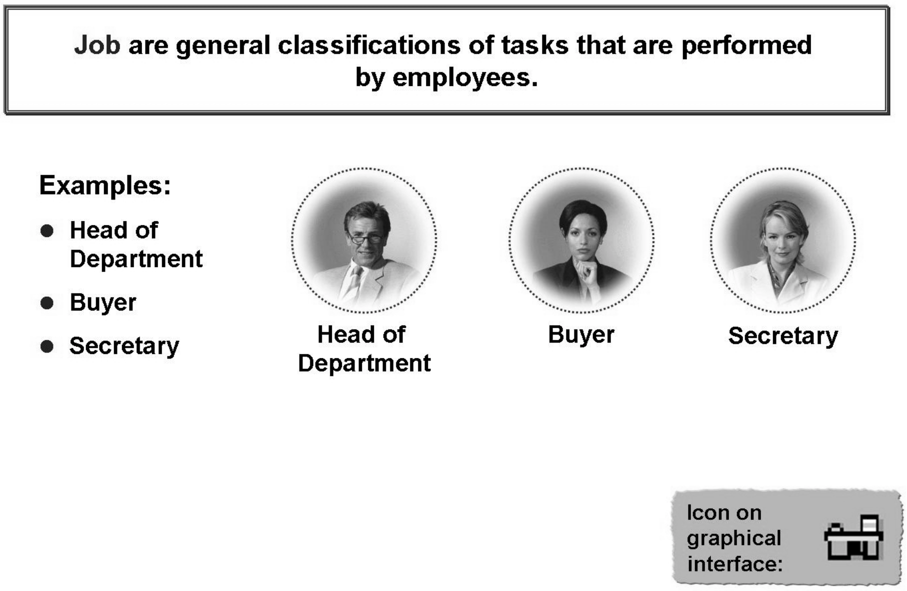


Figure 23: Object Types: Jobs

Each job represents a unique classification of responsibilities in your organization. When you create jobs, you should consider what specific tasks and requirements are associated with the individual jobs.

Jobs are used in the following application components:

- Shift Planning
- Personnel Cost Planning
- Personnel Development

Hint: Your job descriptions should be as general as possible and as specific as necessary.

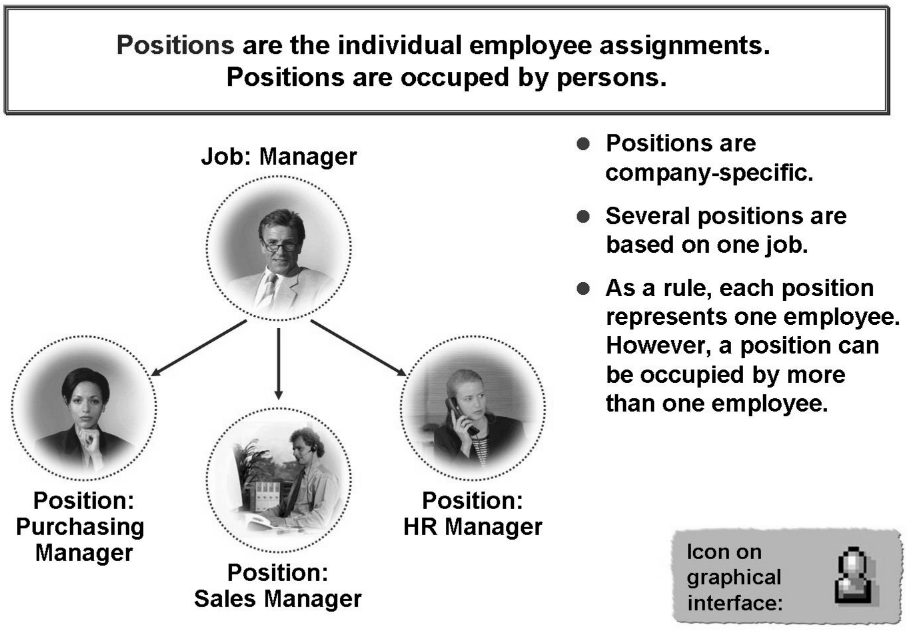


Figure 24: Object Types: Positions

Once you have created a job, you must specify the number of corresponding positions required in the organization.

A position inherits a job's tasks. However, you can also define additional tasks that refer specifically to one position.

Positions can be 100% filled, partially filled, or vacant.

Example:

Positions, rather than jobs, are held by employees. One position may also be shared by a number of employees, each working less than full time. For example, two employees can hold 60% and 40% of a position.

Cost centers can be assigned to organizational units and positions. The releationship between organizations and cost centers is hierarchically inherited along the structure.

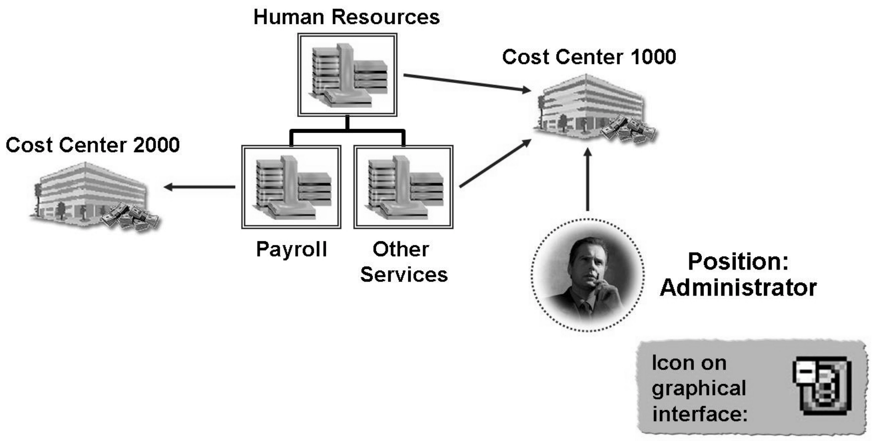


Figure 25: Object Types: Cost Centers

Cost centers are maintained in Controlling and can be linked to either organizational units or positions.

Cost center assignments are inherited along the organizational unit structure.

Persons are objects that hold positions within the organizational structure. Additional information for persons is maintained in Personnel Administration.

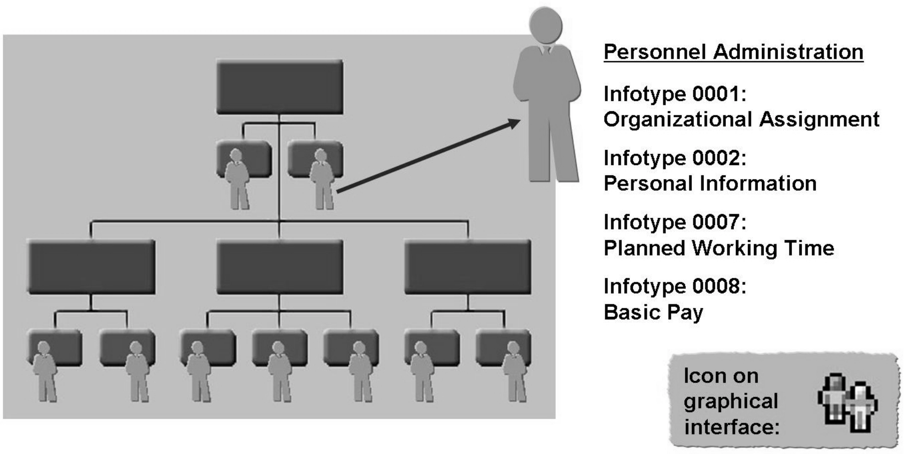


Figure 26: Object Types: Persons

Persons generally represent employees in your company. Persons hold positions in the organizational structure which is governed by Organizational Management.

Infotypes for persons are maintained in Personnel Administration and are linked to an organizational plan through their position assignment.

Other defaults in Personnel Administration employee maintenance can be derived from Organizational Management data, such as the Employee Group/Subgroup Infotype (1013).

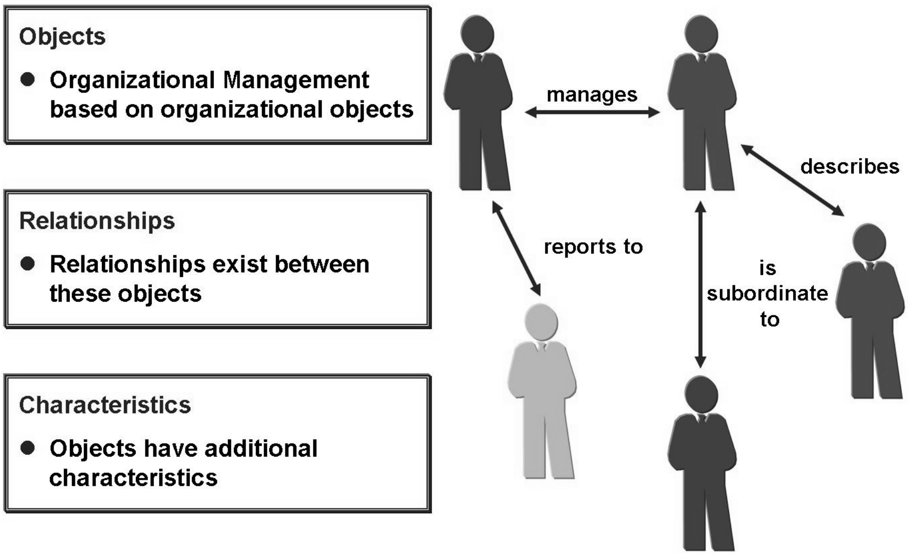


Figure 27: Methodology - Object - Oriented Design

Organizational Management is based on the concept that every element of the organization constitutes a unique object with individual attributes. You create and maintain each object individually. You create relationships between the various objects to form a framework for your organizational plan. This gives you a flexible basis for personnel planning, previewing, and reporting.

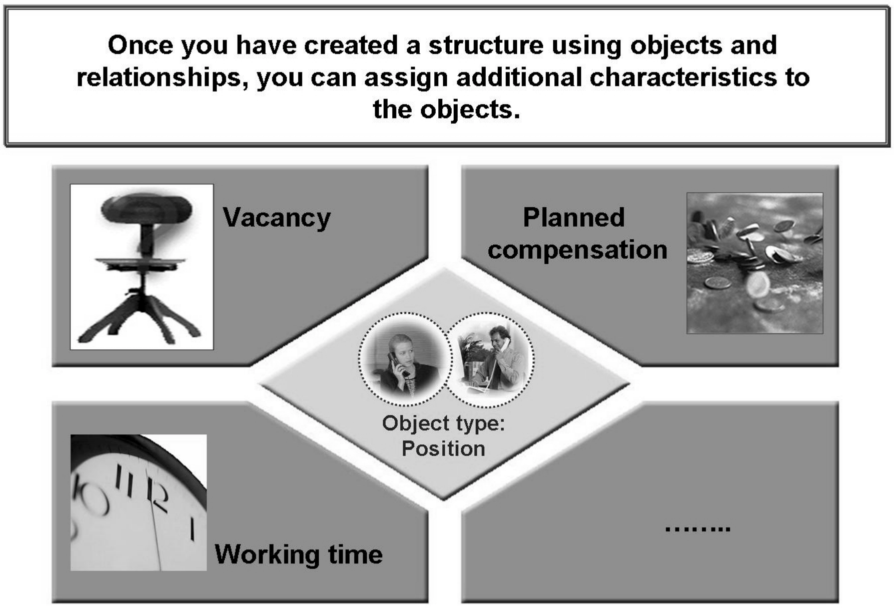


Figure 28: Object Characteristics: Infotypes

Objects consist of three parts:

- The first part (Object infotype) includes the ID number, a short and long text, and the validity period.
- The second part (Relationships infotype) contains the relationship(s) between this and other objects.
- The third part (other infotypes) contains the object characteristics.

All data for an object (existence, relationships, additional characteristics) is created in the form of infotypes.

You can define particular characteristics for an object in each infotype.

Some infotypes can be maintained for all object types, for example, the object and relationship infotypes. Others are only relevant for particular object types, such as the vacancy infotype, which is only relevant for positions.

Not all infotypes are absolutely necessary. However, they can provide important information on objects.

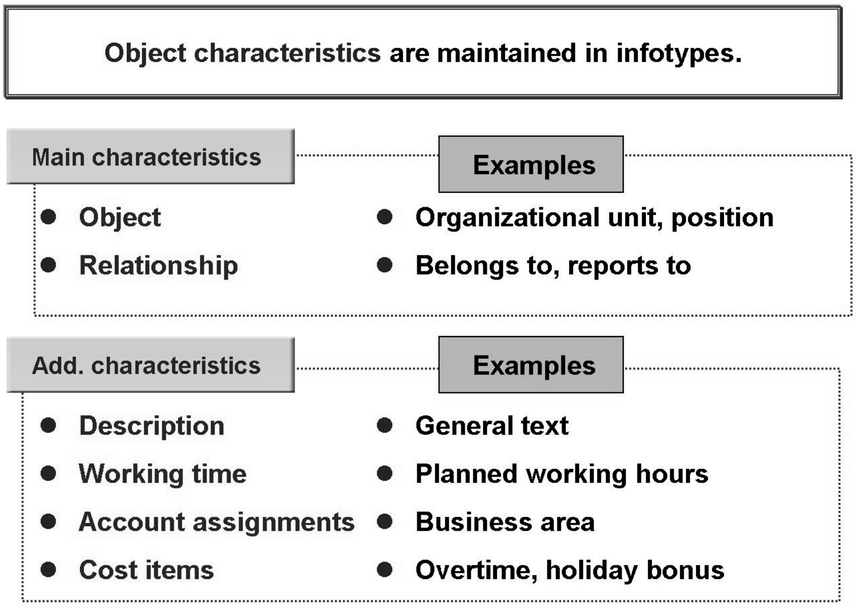


Figure 29: Additional Object Characteristics

Additional characteristics may be created in the form of relationships to other objects, or data stored in other infotypes unique to the object.

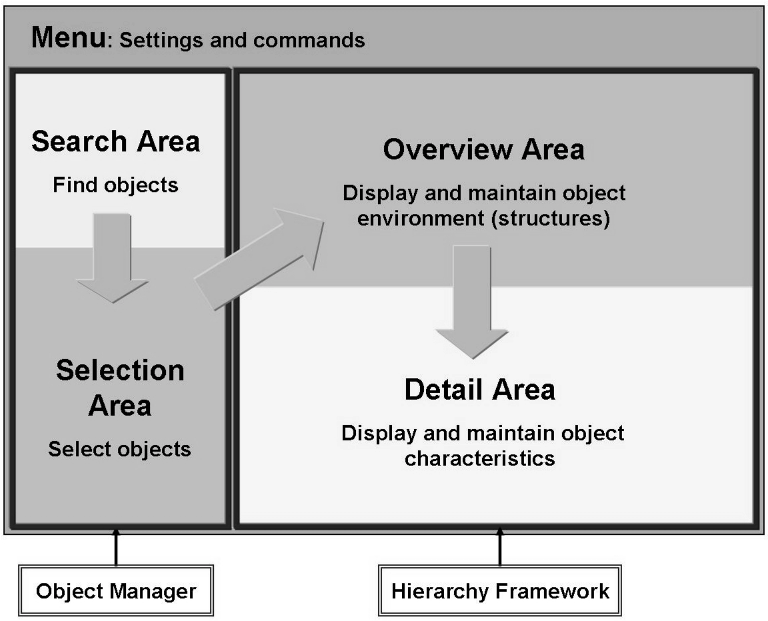


Figure 30: Organization and Staffing: Navigation

On the left side of the screen is the object manager, which is divided into a search area above and a selection area below.

You can use the search area to locate objects such as organizational units, persons, jobs, positions, und users. In the selection area you can use the search results to select an object to be used in the overview and/or detail areas.

The right side of the screen, or the hierarchy framework, is divided into an overview area and a detail area.

In the overview area, you can view the organizational unit hierarchy or staffing assignments of an organizational unit.

In the detail area, you can maintain objects and their characteristics using the various tab pages.

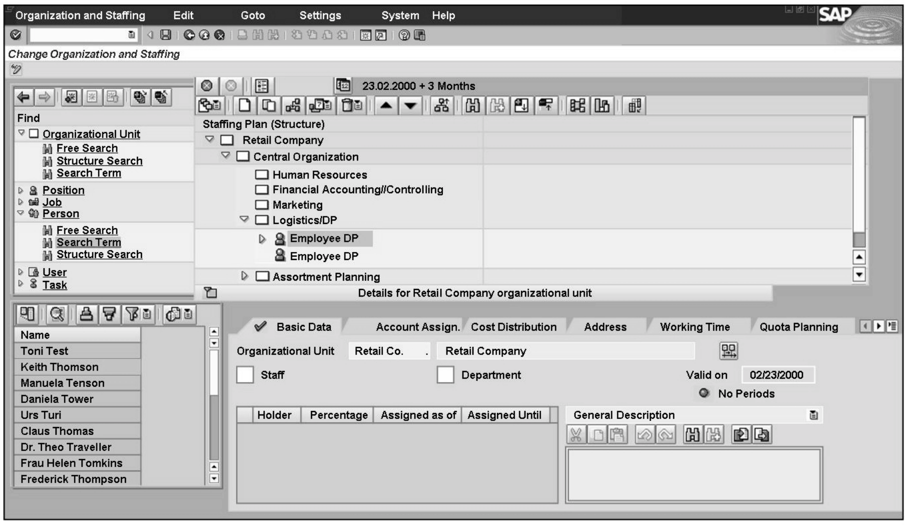


Figure 31: Organization and Staffing

Organizational plans are defined in Organizational Management. This can be done in Organization and Staffing or the Expert Mode.

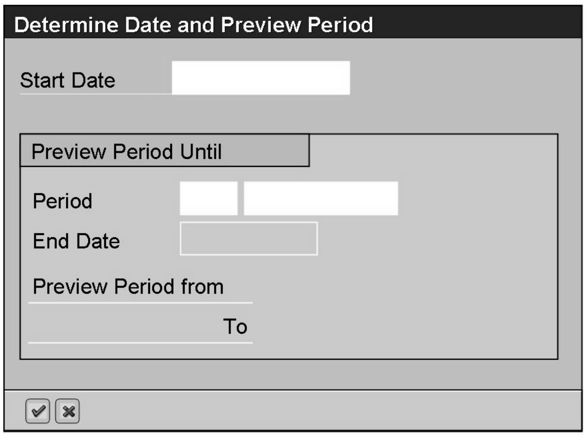
The functions in Organization and Staffing let you create organizational units, positions, jobs, and tasks quickly and easily. You only specify the most important details for these objects. Organization and Staffing creates the relationships automatically.

In Organization and Staffing you can:

- Maintain the basic data for your organizational plan
- Maintain the reporting structure (hierarchy of positions) that exists between the positions in your organizational plan
- Maintain cost center assignments
- Maintain certain infotypes

All objects you create in Organization and Staffing are automatically assigned the status 'active' and an object ID.

Each infotype uses a start and end date to identify the validity of the infotype data



Validity dates:

- **Enable the definition of the validity of an object or object characteristics**
- **Identify changes in your organization while retaining historical data**
- **Enable the evaluation of the organizational structure on key dates**

Figure 32: Date and Preview Period/Validity Dates

Validity dates determine the existence of an object.

You must assign a validity period to all the infotype records that you create. In this way, you can see all the changes that occur in your company. You receive a dynamic view of your company.

Validity dates enable the user to evaluate certain key data or specific time periods from the past, present or future. The data is selected according to the designated time period.

Figure 33: Important Icons

There are various symbols for selected objects and functions on the Organization and Staffing user interface.

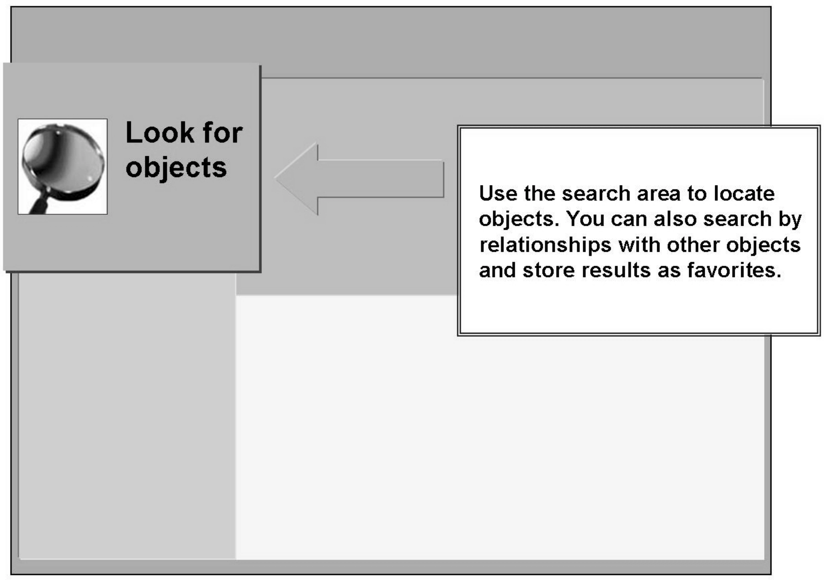


Figure 34: Search Area

In the search area you can use different search tools to search for different objects in Organizational Management.

Save your search variants as "Favorites".

- **In the standard system there are three search tools available in the search area (symbol).**

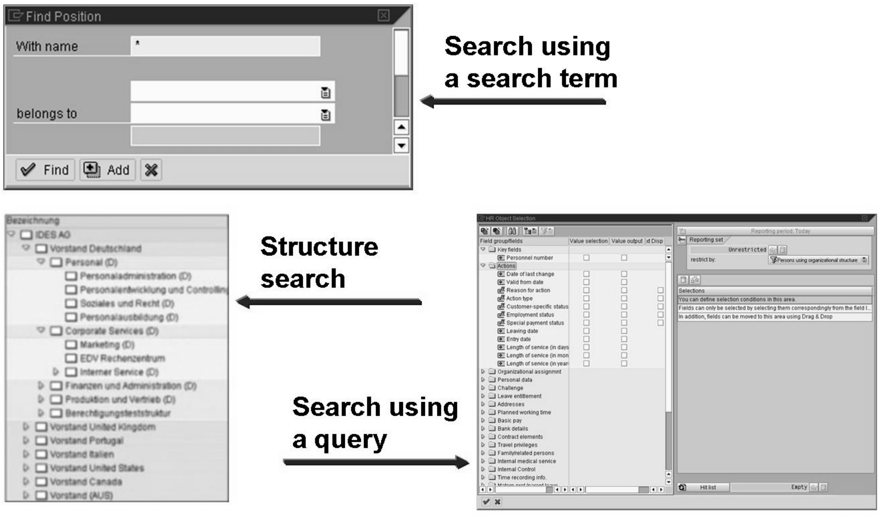


Figure 35: Search Tools in the Search Area

Search using a search term: you can enter the name, abbreviation or ID of the object in question. You can also search for objects that are assigned directly or indirectly to another object (for example, all positions of the organizational unit *HR Department*).

The following search tools are also available:

- Structure search
- Search using a query (free search)

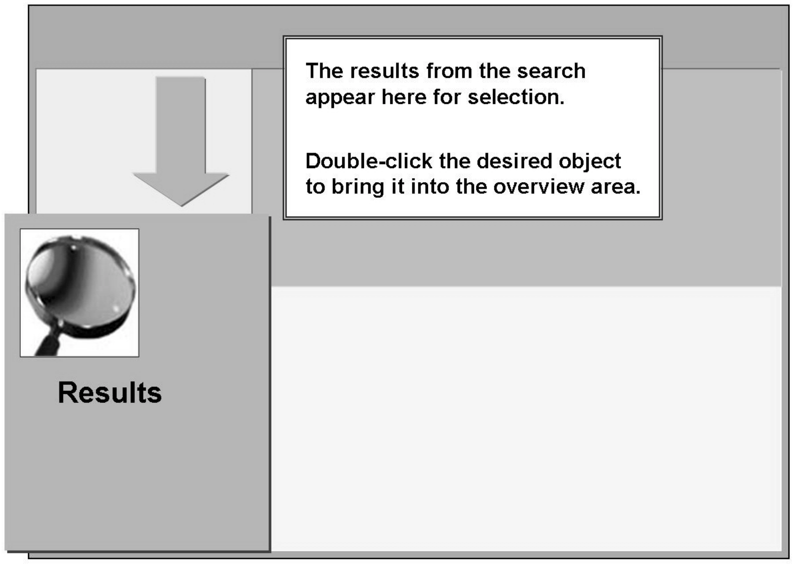


Figure 36: Selection Area

Use your search results to maintain objects or assign them to other objects using Drag & Drop.

You can also define which details should be shown or hidden.

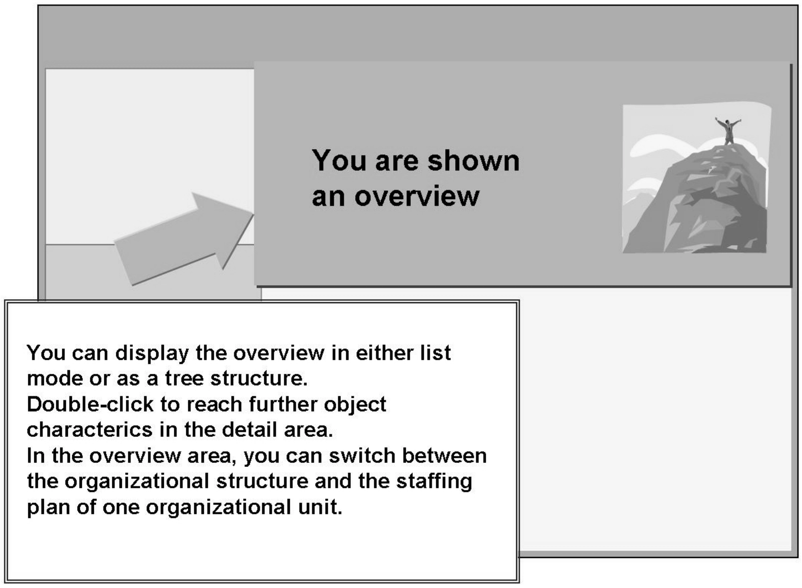


Figure 37: Overview Area

Display organizational units in their tree structure and 'double-click' them to bring them into the Detail Area to maintain them.

Create new objects within a structure.

View as a list to display staffing assignments to an organizational unit.

You can also define which details should be shown or hidden.

Drag objects from the Selection Area to assign new positions, persons or users to a staffing plan.

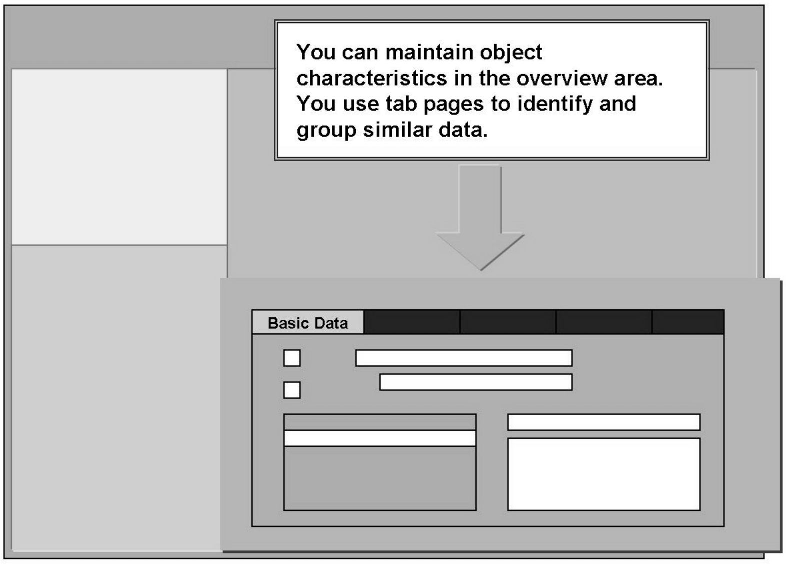


Figure 38: Detail Area

Different attributes, relationships, and characteristics of objects are grouped on different tab pages in the detail area. You can maintain them directly where they are or use drag & drop to maintain them outside the selection area.

View details of data for multiple periods within the processing period.

You can change the data entered until you press save or maintain another object.

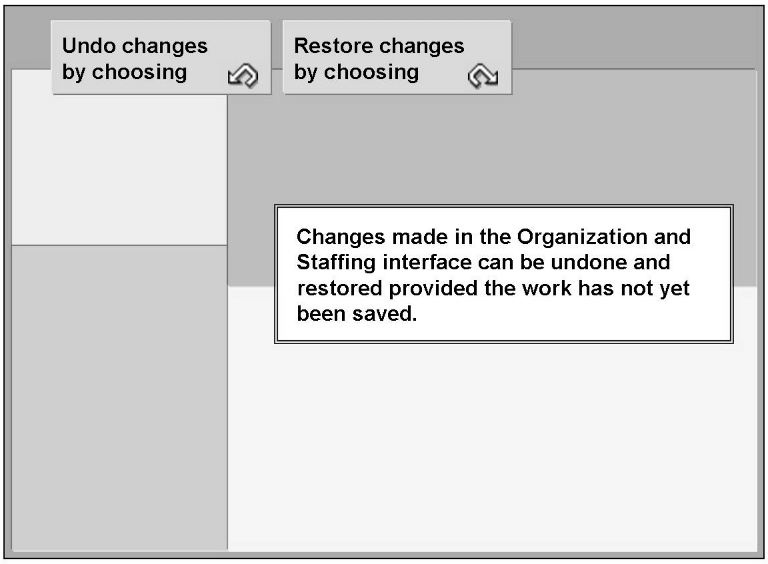


Figure 39: Undo

Icons will be present if functionality is possible.

Undo is not permitted once data is committed to the database.

Summary: Creating the Organizational Plan

- Create root organizational unit
- Create subordinate organizational units
- Create jobs
- Create positions
- Assign cost centers
- Assign persons
- Maintain other object characteristics

These are the steps you would normally take to create your organizational plan.

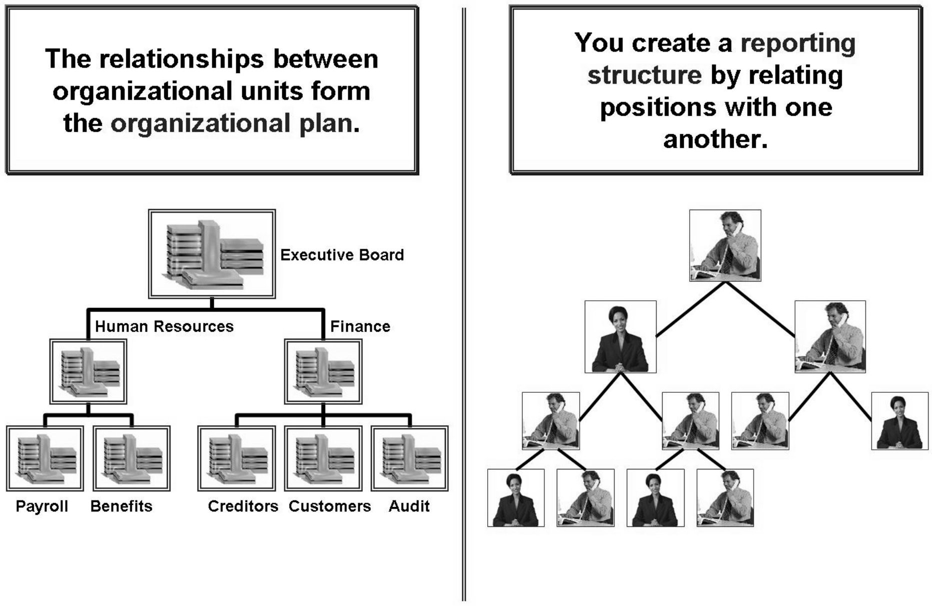


Figure 40: Reporting

Organizational plans and reporting structures represent only a fraction of the reporting functionality that is available in Organizational Management.

You will find the various reporting options under the Information System menu in Organizational Management. This menu is organized according to different object types. You will find the organizational plan in the object type organizational unit. You can access the reporting structure from the object type position. Here, you will also find staff assignments and the position description.

Note:

You can also display reports in Structural Graphics. Structural Graphics also allows you to maintain objects.

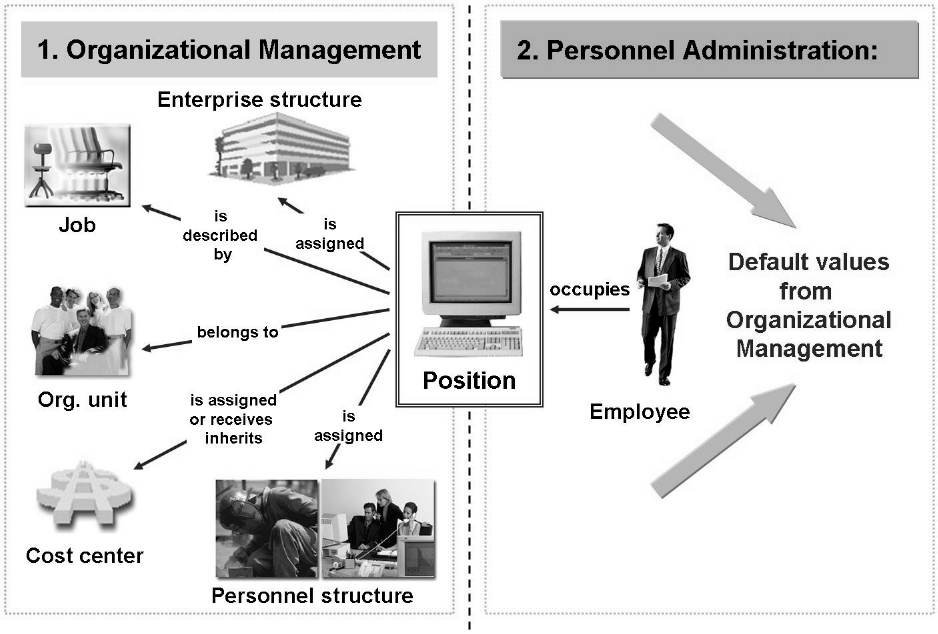


Figure 41: Integration of Personnel Administration and Planning

If Personnel Administration and Organization Management are integrated, you can enter the position in the Actions infotype (0000). This infotype must be maintained first. You cannot overwrite the job, organizational unit, or cost center fields . They specify the relationships to the position.

Default values can be supplied for the personnel area, personnel subarea, business area, employee group and employee subgroup fields.

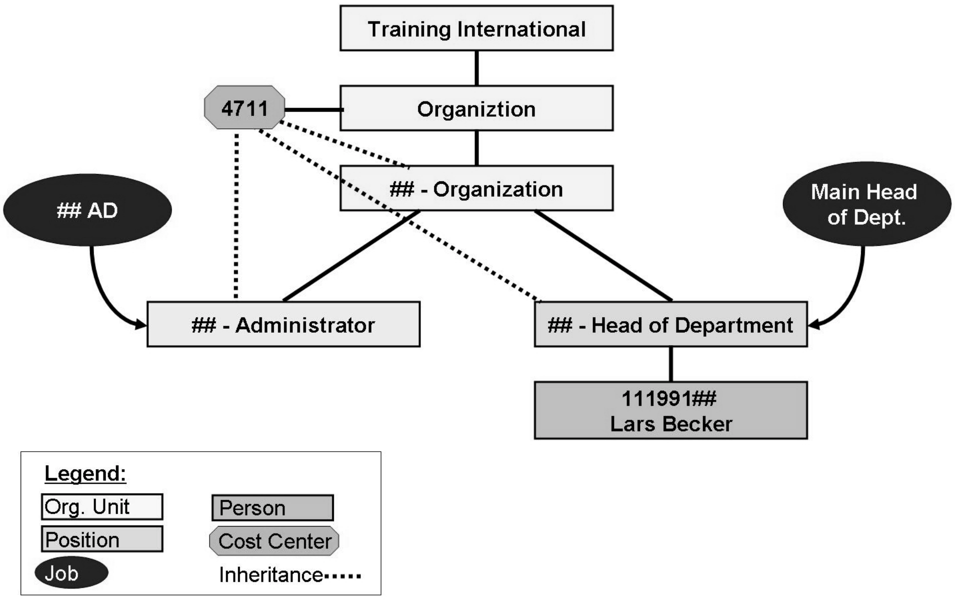


Figure 42: Inheritance of cost centers along the organizational structure

If Controlling and Personnel have already been integrated, the cost center relationship is passed on from Organizational Management to Personnel Administration.

45 Exercise 2: Organizational Management

Exercise Duration: 10 Minutes

Exercise Objectives

After completing this exercise, you will be able to:

- Change the Organization and Staffing interface
- Use to display and maintain your company's organizational plan

Business Example

Your employees' data changes over time. These changes must also be made in the HR system.

Task 1:

Find out about your company's organizational plan.

1. Call the Organization and Staffing transaction and, as an initial point of access, select the organizational unit "Training International".
2. Under the organizational unit *Training International*, navigate in the overview area to the organizational unit *Organization* and then to the organizational unit ## *Organization* (## = your group number). Display which person is assigned to the position ## *Head of Department* (## = your group number) and the job on which the position is based.

Task 2:

Optional

Change your company's organizational plan:

1. As of 01/01/2005, add a further position "## Administrator" with the abbreviation ## Ad, which is based on the job ## Administrator (## = group number), under the organizational unit "## Organization".

Solution 2: Organizational Management

Task 1:

Find out about your company's organizational plan.

1. Call the Organization and Staffing transaction and, as an initial point of access, select the organizational unit “Training International”.
   a) Start the Change Organization and Staffing transaction from the SAP Easy Access Menu:

      Human Resources → Organizational Management → Organizational Plan → Organization and Staffing → Change

   b) In the search area, under Organizational Unit choose “Search Term” and search for the term “Training International”.
2. Under the organizational unit *Training International*, navigate in the overview area to the organizational unit *Organization* and then to the organizational unit ## *Organization* (## = your group number). Display which person is assigned to the position ## *Head of Department* (## = your group number) and the job on which the position is based.
   a) In the selection area, double-click on the entry “Training International” to transfer it to the overview area.
   b) In the overview area under the organizational unit “Organization”, navigate to the organizational unit ##-Organization and then the position ## Head of Department. (## = your group number). Double-click on this position.

      The person Lars Becker and the job Main Head of Department belong to this position.

Continued on next page

Task 2:

Optional

Change your company's organizational plan:

1. As of 01/01/2005, add a further position “## Administrator” with the abbreviation ## Ad, which is based on the job ## Administrator (## = group number), under the organizational unit “## Organization”.
   a) Click on the Date and preview period button. Enter the value 01/01/2005 as the start date and choose Execute.
   b) In the overview area, double-click on the organizational unit ## Organization (## = your group number).
   c) Choose the Create button and in the popup that appears, double-click on the Position object type.
   d) On the Basic Data tab page, enter the abbreviation ## Ad and the name ## Administrator (## = your group number).
   e) In the Job field, enter the value ## Administrator or use the input help to select the relevant entry.
   f) To save your entries, choose Save.

Lesson Summary

You should now be able to:

- Explain the organizational plan

Unit Summary

You should now be able to:

- Navigate as a user in the mySAP ERP system
- Describe the structures in HCM
- Explain the organizational plan

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Test Your Knowledge

1. The F1 key

   Choose the correct answer(s).

   □ A Saves your data in the system.

   □ B Displays explanations for fields and functions, and technical information.

   □ C Displays input options.

2. The personnel subarea...

   Choose the correct answer(s).

   □ A Contains control features of the company structure.

   □ B Is a self-contained unit within the system, in legal and organizational terms.

   □ C Requires a new personnel number to be created for an employee transfer.

   □ D Is a unit whose accounts are balanced independently.

3. The Position object type is

   Choose the correct answer(s).

   □ A K

   □ B P

   □ C S

   □ D C

52

Answers

1. The F1 key

   Answer: B

   The F1 key displays explanations for fields, functions and messages.

2. The personnel subarea...

   Answer: A

   The principal organizational aspects of human resources are controlled at the personnel subarea level, namely the pay scale and wage type structures and the planning of work schedules.

3. The Position object type is

   Answer: C

   The Position object type is S for specification.

Unit 2

53

Hiring an Employee

For more information, see the Instructor Guide in SAPNet.

Unit Overview

- Applicant Data
- Employee Data
- Time Data
- Employee Self-Service (ESS)

Unit Objectives

After completing this unit, you will be able to:

- Explain the recruitment process
- Understand the basics of the E-Recruiting solution.
- Maintain employee data
- Explain the fundamental concepts of Time Management
- Describe Employee Self-Service

Unit Contents

Lesson: Applicant Data

54

Lesson Duration: 30 Minutes

Lesson Overview

In this lesson, you learn the basics of the Recruitment process.

Lesson Objectives

After completing this lesson, you will be able to:

- Explain the recruitment process

For more information, see the Instructor Guide in SAPNet.

Business Example

You receive applications and hire an applicant.

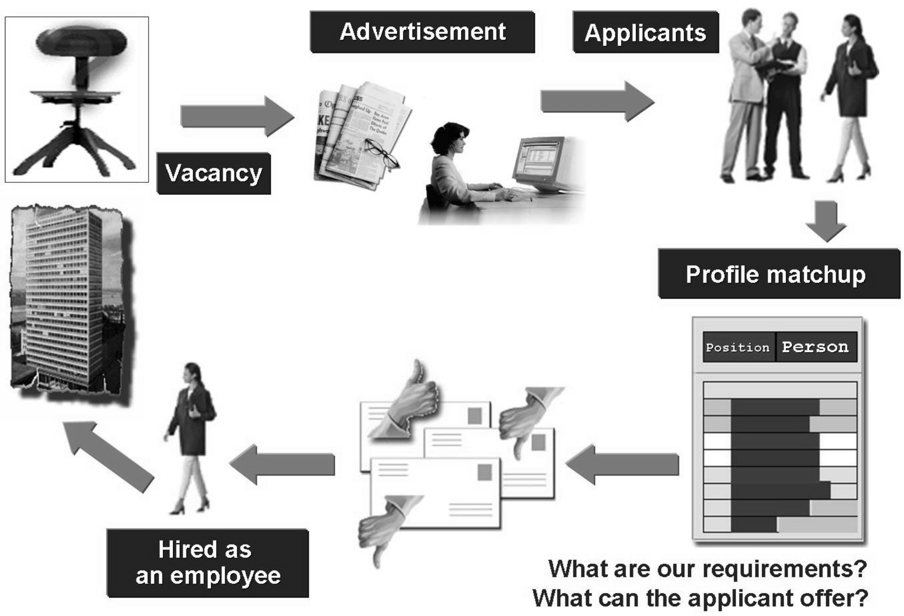

Figure 43: From the Vacancy to the Hiring

The *Recruitment* component enables you to carry out the entire recruitment procedure, from entering applicant data to filling vacant positions.

The SAP system supports you in identifying workforce requirements, creating job advertisements, screening applicants, and managing applicant correspondence. When you hire an applicant, you can transfer the applicant data recorded in *Recruitment* to *Personnel Administration* as employee data.

Line managers can use the *Manager's Desktop* to map their decisions on applicants efficiently and cost-effectively, and to trigger further administration in the HR department.

External applicants and employees can apply online in the *Employment Opportunities* Web application or in the Employee Self-Service application *Employment Opportunities*.

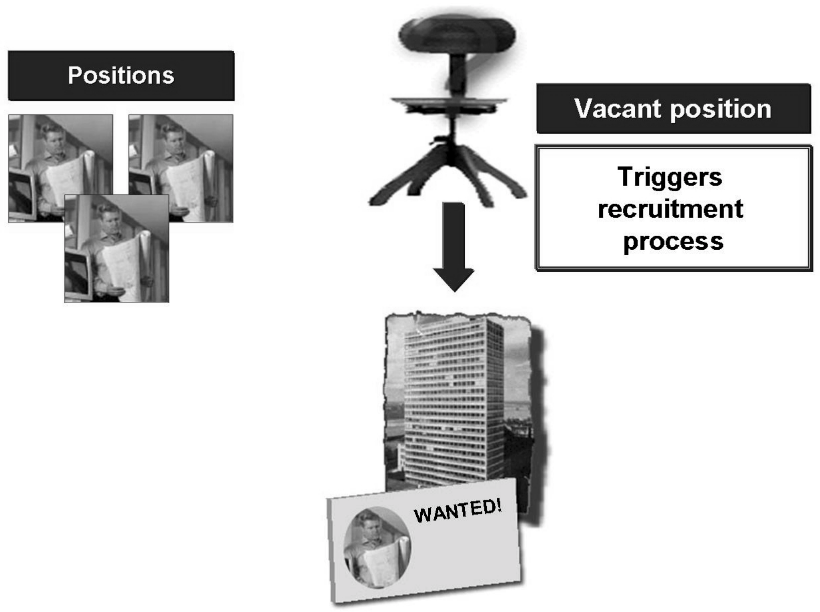

Figure 44: Vacancies in the Recruitment Process

A company's personnel requirements are represented as vacancies in the recruitment process.

Vacancies are positions that need to be filled (either completely or partially). For these positions to be included in the recruitment process, they must be marked as vacant.

If integration with *Organizational Management* is active, vacancies are created in *Organizational Management*. The *Vacancy* Infotype (1007) is created for this position and filled with the relevant information.

Note:

When you create the vacancy, you can also enter the abbreviation for the personnel officer responsible. This simplifies data selection in subsequent steps.

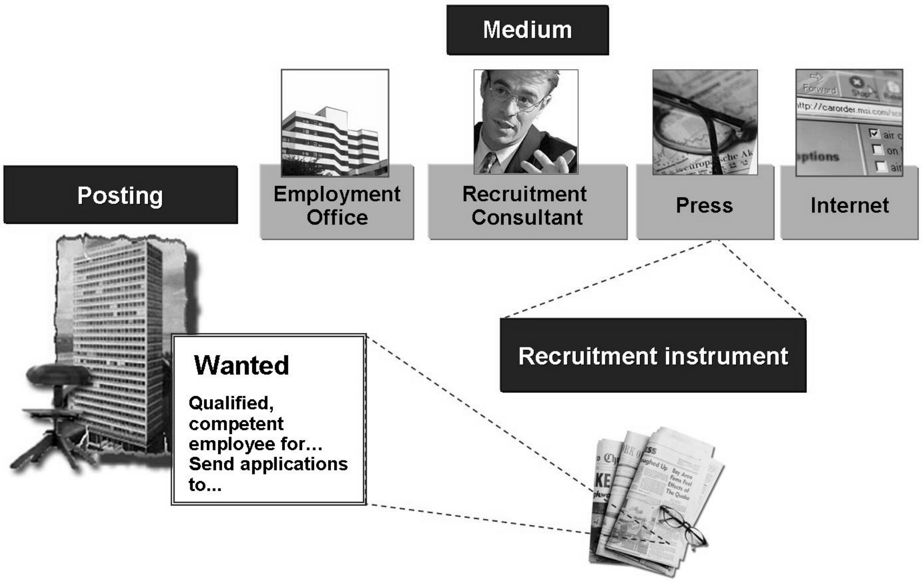

Figure 45: Publishing Vacancies

Vacancies are published in advertisements. An advertisement is an announcement of one or more vacancies published in a recruitment instrument with the aim of recruiting suitable candidates.

Examples of recruitment instruments are a particular newspaper or the employment office in a particular town. Recruitment instruments are grouped according to the medium used (such as the press, employment office, recruitment agency). Media and recruitment instruments are created in Customizing.

You create advertisements in Recruitment. You can enter text, assign one or more vacant positions, and record the publication date, advertising end date, and publication costs for each advertisement. You can evaluate this information to monitor the effectiveness of your advertising.

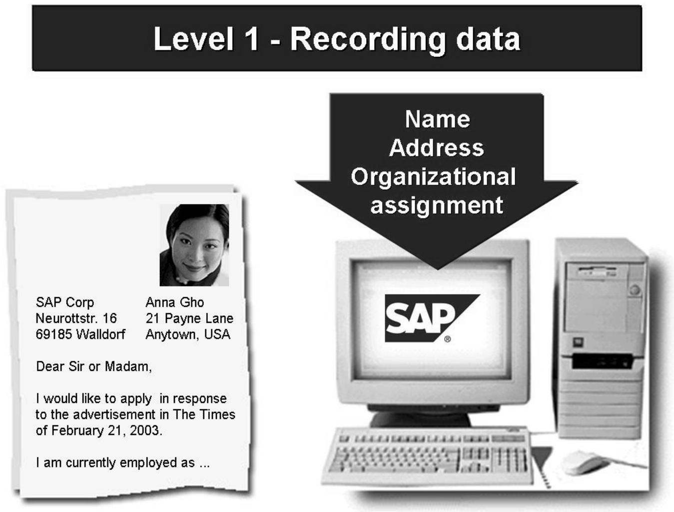

Figure 46: Two-Level Data Entry Concept (1)

The two-level data entry concept enables you to classify applicant data according to features regarding time and organization.

The first level of data recording, recording basic data, is obligatory for all applicants. Here, all the data that is needed to create applicant letters and for statistical purposes (such as name, address, potential organizational assignment) is recorded.

Figure 47: Two-Level Data Entry Concept (2)

The second level of data recording, entering additional data, is only carried out for applicants who are of continued interest to the company. At this stage, you can assign an applicant to one or more vacancies. Information such as the applicant's qualifications, education, and previous employment is recorded during this stage.

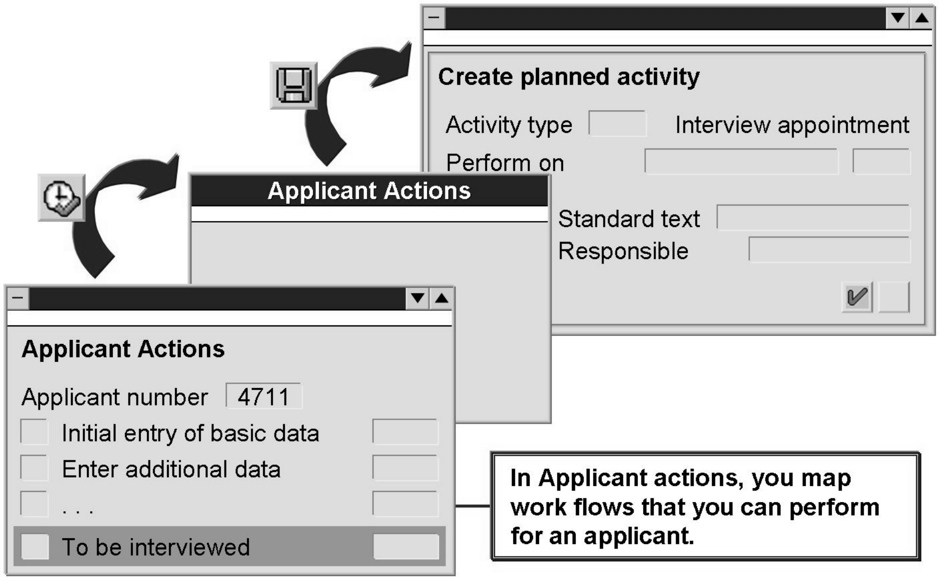

Figure 48: Applicant Actions

The *Applicant Actions* infotype (4000) serves as a record of all applicant actions carried out for an applicant. These applicant actions can be:

- Process flows for data recording (such as initial entry of applicant data, recording additional data)
- Procedures which change the applicant's overall status (such as reject applicant, put applicant on hold)

The most important information contained in the infotype is the overall status of the applicant (such as *processing, on hold, rejected*). This is dependent on the latest applicant action carried out for the applicant. For example, if the applicant action *put applicant on hold* was performed for an applicant, the applicant is designated the overall status *on hold*. In the standard SAP system, a new record is created in the *Applicant Actions* infotype (4000) for every action performed for an applicant.

Applicant actions can trigger applicant activities.

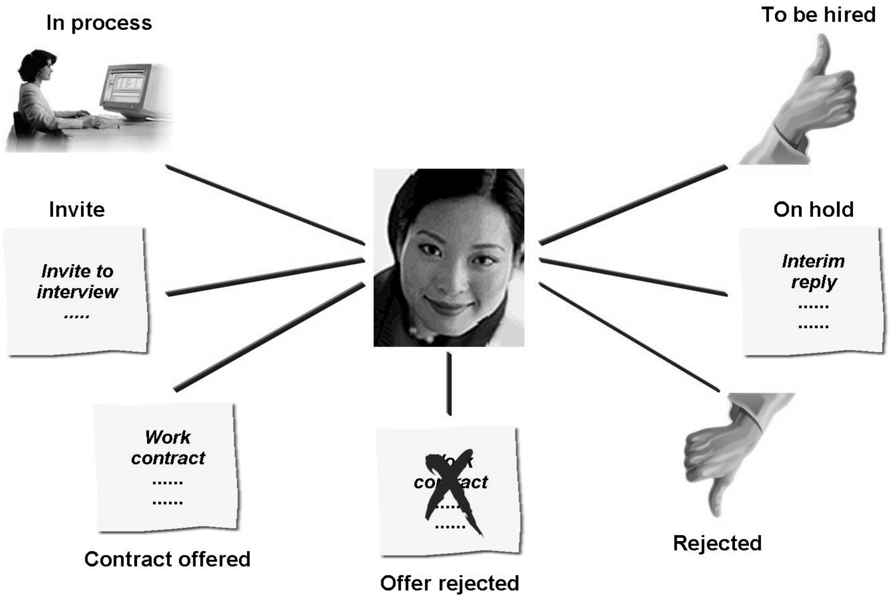

Figure 49: Applicant Status

According to the two types of selection procedures, there are two types of applicant status:

- Overall status

  This indicates the applicant's current status (such as processing, on hold, invite) in the global selection procedure for the company.

- Vacancy assignment status

  This refers to the actual status of an applicant for a particular vacancy.

Overall status is determined during the initial entry of applicant data phase and must be available for every applicant from this point onwards.

The overall status relates to the global selection process for an applicant.

The vacancy assignment relates to the selection process for one vacancy for an applicant.

Overall status shows whether an applicant is involved in at least one selection procedure (overall status could be processing, put on hold, or invite) or whether he or she has been excluded from all selection procedures (overall status could be rejected or to be hired).

An applicant receives a vacancy assignment status as soon as he or she has been assigned to a vacancy. If an applicant has been assigned to more than one vacancy, he or she has a vacancy assignment status for each vacancy.

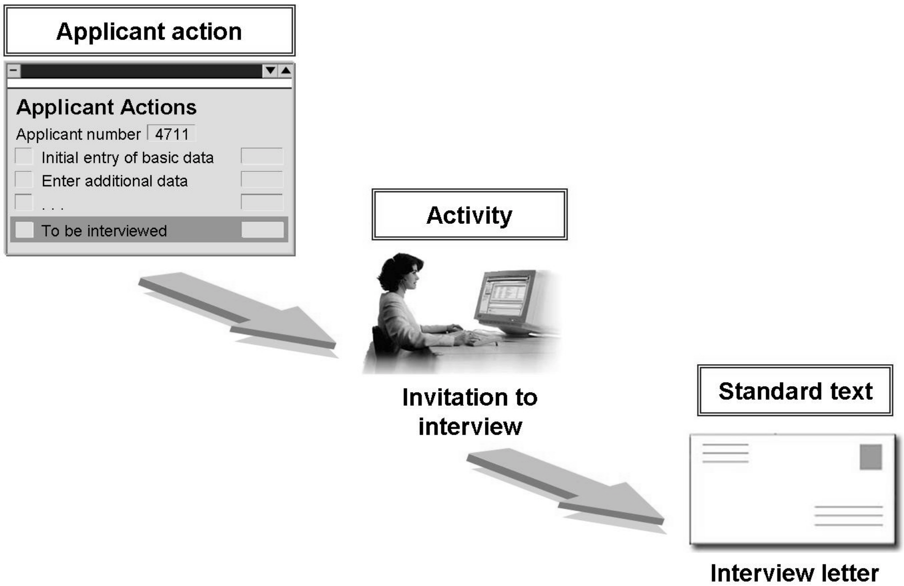

Figure 50: Applicant Activities and Applicant Correspondence

Activities carried out for an applicant within a selection procedure are entered, logged, and planned using applicant activities.

An applicant activity is a specific administrative step that an applicant passes through in the selection procedure, such as confirmation of receipt of application, invitation to interview.

Applicant activities can be linked to standard texts. When an applicant activity is created, the system can automatically print a standard letter for applicant correspondence.

Certain applicant activities are created automatically for an applicant when you perform an applicant action. For example, if you invite an applicant for a job interview, the system automatically creates the applicant activity *mail invitation to interview*. You can print the invitation letter for the applicant via this activity.

In the standard system, standard texts are delivered in Word and SAPscript.

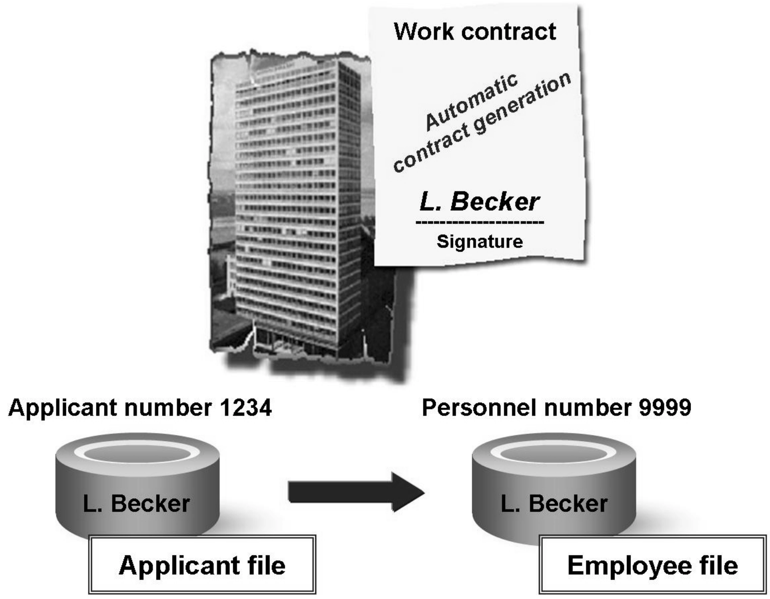

Figure 51: Hiring an Applicant

When you hire an applicant, you can transfer the applicant data to *Personnel Administration*. You transfer the applicant data directly from the applicant database to the employee database.

All data you enter in the *Recruitment* infotypes is adopted as default values in *Personnel Administration* after the data transfer. This means that you can continue to use the data you have created for applicants when they become employees, but you can also change the data. As a result, the amount of processing required is reduced significantly.

In integrated systems, data transfer takes place either directly in Recruitment or directly in Personnel Administration.

You can enter the additional data, such as working time and salary details, later in Personnel Administration.

Hint: You have the option of having the system automatically generate contracts for the applicants you want to hire.

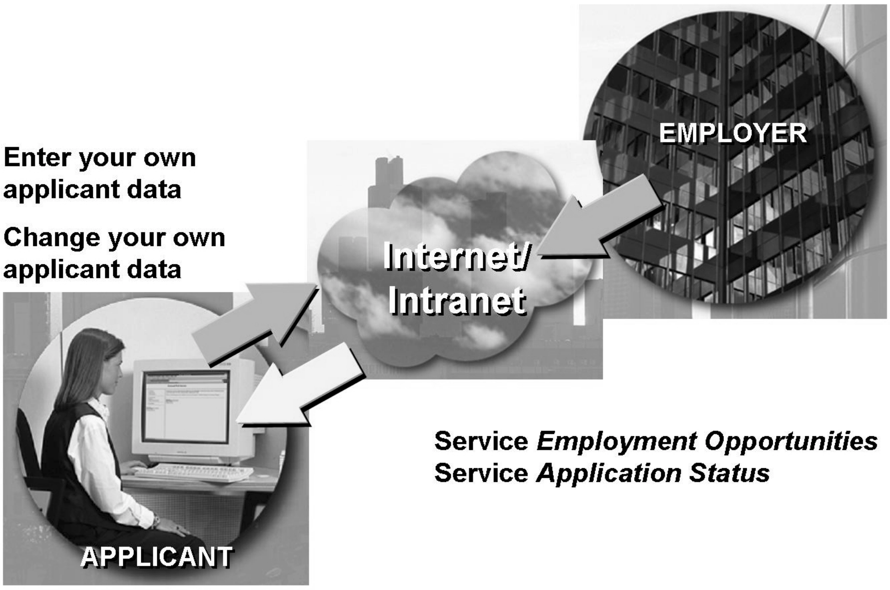

Figure 52: Applying via the Internet

The *Employment Opportunities* service helps companies perform recruitment effectively by enabling employees to:

- View your company's job advertisements
- Apply for positions in your company

Applicants can display either the employment opportunities for certain regions only or a general list of employment opportunities. Each advertisement includes a brief description of the position and its requirements. The system refers to the advertisements stored in Recruitment for information on the position.

Applicants can apply for posted positions and also submit unsolicited applications. Applicants apply for jobs over the Internet by specifying information such as personal data, work experience, qualifications, and education. This data is automatically copied to the mySAP ERP system.

Hint: As of SAP R/3 Enterprise, applicants can also update and change the data they recorded.

Applicants can also send application documents electronically.

The system provides applicants with a user ID and password, which enables them to check the status of their application at a later date. This is provided by a second service called Applicant Status.

New E-Recruiting Solution: Overview

- Talent Relationship Management (TRM)
- Requisition Management for Recruiters
- Applicant Tracking
- Collaboration
- Analytics

mySAP ERP E-Recruiting is a complete solution for recruitment. It is completely Internet-enabled. mySAP ERP E-Recruiting 3.0 will have the status of Mass Availability as of the 4th quarter of 2004.

Goals

- Cost Reduction

  Including the reduction of process costs, costs for groupwide infrastructure, and the costs for talent acquisition.

- Increase in Efficiency

  Including automation of administrative tasks in recruiting, realignment of the recruiter role to include advisory tasks, improved use of existing candidate contacts.

- Better target achievement/effectiveness

  Including higher accessibility of candidates/talents, particularly in critical segments, employee retention.

- Preparation for the Future

  Including the introduction of new concepts and processes, alignment of the organization to future challenges (Change Management).

The main processes of recruitment are included – from planning the workforce requirement and publishing the vacancies, to hiring applicants and building long-term relationships with candidates. Recruiters can find current and potential applicants more efficiently, and retain them.

SAP E-Recruiting can be used as follows:

- As a standalone application
- As a standalone application, integrated into the backend system (HR, BW)
- ERP installation (E-Recruiting as part of the ERP solution)

Reduction in Administrative Costs through:

- Online self-service applications
- Applications
- Inclusion of attachments
- Open interfaces for transfer of third-party applications (job boards)
- Central storage of all applications with online access for everyone involved
- Automated receipt confirmations and evaluations (ranking) of online applications
- Use of process templates to process activities

Reduction of paper costs, whenever possible, through:

- Self-service applications for the applicant (applications, status retrieval, and so on)
- E-mail/questionnaire interaction between the recruiter and the applicant
- Integrated correspondence through all media (paper, e-mail, self-service applications)
- Flexible search through all applications
- Authorizations determining who can see what information
- Provision of all information (data overviews) also in PDF format

Standardization with the required flexibility through:

- Letter/e-mail templates for each management step
- Personalization of letters for each application
- Central process templates, possibility to define exceptions for each application
- Standardized self-service application scenarios, possibility to modify these scenarios specific to the postings (questionnaire)
- Process templates: These consist of an arrangement of process steps to which activities are assigned (for example, inviting an applicant for an interview or rejecting an applicant). When a process template is linked with a requisition, the recruiter is guided through the Applicant Tracking process.
- Lists of activities provide a better overview

Integration Key Focus HCM

- Organizational Management
  - Use of organizational plan
- Personnel Administration
  - Employee as internal applicant
- Personnel Administration
  - Data transfer when applicant is hired
- Personnel Development
  - Transfer of qualification catalog

You can use the following integration possibilities between the new E-Recruiting solution and mySAP ERP HCM:

- Use of organizational plan (organizational units, positions, jobs, and so on)
- Automatic identification of an employee as an internal applicant
- Automatic data transfer when the candidate is hired
- Transfer of the HR qualification catalog for Personnel Development

67

Exercise 3: Applicant Data

Exercise Duration: 10 Minutes

Exercise Objectives

After completing this exercise, you will be able to:

- Display applicant data
- Call short profiles
- Display applicant activities

Business Example

You can display the data of your applicants at varying levels of detail.

Task:

1. In the applicant master data, display the Organizational Assignment infotype (0001) for former applicant Lars Becker (applicant number 1493). Find out which personnel officer was responsible for Lars at that time.
2. In the applicant master data, display the short profile for former applicant Lars Becker (applicant number 1493).
3. In the applicant activities, display which subprocesses have already been performed for former applicant Lars Becker (applicant number 1493), and record the individual activities.

Solution 3: Applicant Data

Task:

1. In the applicant master data, display the Organizational Assignment infotype (0001) for former applicant Lars Becker (applicant number 1493). Find out which personnel officer was responsible for Lars at that time.
   a) In the Easy Access menu, choose *Human Resources → Personnel Management → Recruitment → Appl. Master Data → Display*.
   b) Enter *1493* as applicant number and under *Applicant data* select the *Organizational Assignment* infotype (0001).
   c) Choose *Display*.
   d) In the *Personnel Officer* field, you find the information:

      Anja Müller
   e) Return to Display applicant master data by choosing *Back*.
2. In the applicant master data, display the short profile for former applicant Lars Becker (applicant number 1493).
   a) Choose *Short Profile* to display selected applicant data such as the *qualifications* of Lars Becker.
   b) Choose *Back* to return to the Easy Access Menu.
3. In the applicant activities, display which subprocesses have already been performed for former applicant Lars Becker (applicant number 1493), and record the individual activities.
   a) In the Easy Access menu, choose *Human Resources → Personnel Management → Recruitment → Applicant Activity → Display*.
   b) Enter *1493* as the applicant number and choose *Execute*.
   c) The following completed applicant activities are displayed:

      Hire applicant, Mail contract, Interview appointment, and Receipt
   d) Choose Back to return to the Easy Access Menu.

Lesson Summary

You should now be able to:

- Explain the recruitment process

Lesson: The E-Recruiting Solution

70

Lesson Duration: 15 Minutes

Lesson Overview

In this lesson, you will learn about the new E-Recruiting solution.

Lesson Objectives

After completing this lesson, you will be able to:

- Understand the basics of the E-Recruiting solution.

This unit describes the E-Recruiting solution version 3.00. You can show an MSS by using IDES Demo scenarios.

A new course (HR316) is currently (March 2005) being developed that will deal with the E-Recruiting solution.

Business Example

As a personnel officer, you require a central data basis to form long-term relationships with internal and external applicants.

You want to find out about the recruitment processes offered by the E-Recruiting solution.

Figure 53: E-Recruiting Solution: Overview

The E-Recruiting solution is a comprehensive, Web-based recruiting solution.

Goals:

- Cost reduction

  Including reduction of process costs, the costs for the concern-wide infrastructure, and talent acquisition costs.
- Increased efficiency

  Including automation of administrative tasks in recruiting, realignment of recruiters to consulting tasks, more efficient use of existing candidate contacts.
- Improved target achievement/effectivity

  Including greater accessibility of candidates/talent (particularly in areas that are short staffed), and employee retention.
- Preparation for the future

  Including introduction of new concepts and processes, and alignment of the organization to the challenges of the future (Change Management).

The main recruitment processes are mapped: Planning of workforce requirements, vacancy posting, applicant hiring, and building up long-term contact to candidates. The solution enables the HCM department to find current and potential applicants more efficiently and to maintain long-term relationships with them.

You can use E-Recruiting in the following ways:

- As a standalone solution
- Standalone with integration to back-end systems (HCM, BI)
- As an ERP installation (E-Recruiting as part of the ERP solution)

- **Online (Self-Service)**
- **Include attachments**
- **Open interfaces for transfer of third-party applications (job boards)**
- **Central repository for all applications with online access for all parties**
- **Automated confirmation of receipt and ranking of online applications**
- **Use of process templates for processing activities**

Figure 54: Reducing the Administrative Workload

One focus of the Solution E-Recruiting is reducing the amount of paperwork required wherever possible through:

- Self-service for applicants (applications, status query)
- E-mail/questionnaire interaction between recruiter and applicant
- Integrated correspondence in all media (paper, e-mail, self-service)
- Flexible search through all applications
- Authorizations controlling information display
- Provision of all information (data overviews) in PDF format as well

Standardization with flexibility through:

- Letter/e-mail templates for each administrative step
- Personalization of letters for each application
- Central process templates with the option of defining exceptions for each application
- Standardized self-service application scenarios with the option of posting-specific adjustment (questionnaires)
- Process templates consist of a series of process steps to which activities are assigned (for example, invite to interview or reject applicant). Linking a process template with a requisition leads the recruiter through the Applicant Tracking process.
- Activity list for a clearer overview.

Figure 55: Options for integration with mySAP ERP HCM

You can use the following integration options between the E-Recruiting solution and mySAP ERP HCM:

- The organizational plan (organizational units, positions)
- Automatic identification of an employee as an internal applicant
- Automatic data transfer when candidates are hired
- Transfer of the qualifications catalog from *Personnel Development*

Figure 56: Talent Relationship Management (TRM)

The purpose of the Talent Pool is to build up and foster long-term relationships with applicants.

It serves as the central database for internal and external applicants.

Information about qualified candidates for whom the company currently has no vacancies can be used in future recruiting processes.

Candidates can register in the Talent Database and store information about their qualifications, interests, and career plans.

The purpose of TRM is to provide an environment where companies can practice **proactive**, as opposed to reactive, candidate recruitment.

The following data can be stored in the Talent Pool:

- Current data for all applicants
- Data for all unsolicited applicants
- Data for all interested persons registered in the pool
- Data for all employees (internal applications)

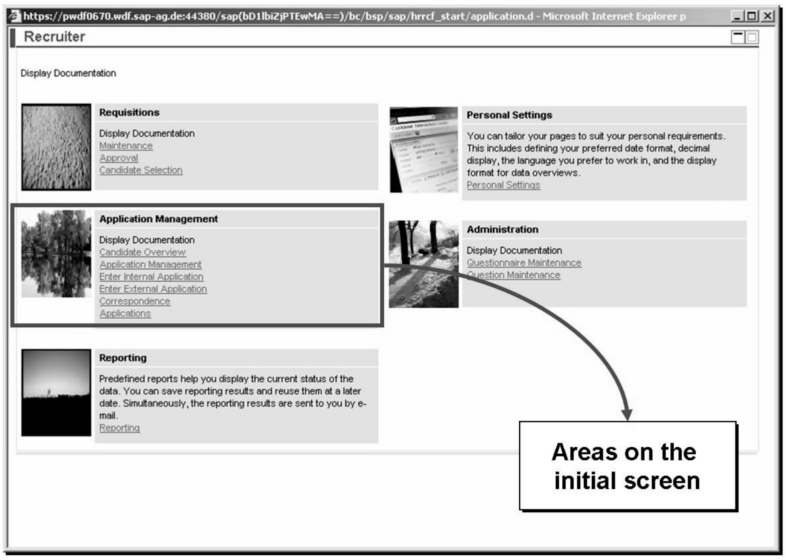

Figure 57: Initial Screen for Recruiter

The start page is divided into the following areas:

- Requirements
- Recruitment
- Reporting
- Personal Settings
- Administration

Pages that contain the same kind of content are grouped together. You can configure this in Customizing.

- **Flexible search machine and postings management**
- **Processing of templates with activities and questionnaires**

Figure 58: Requisition Management for Recruiters

Requisition Management allows:

- Assignment of a support team with different roles and workflow tasks to a requisition
- Determination of a recruitment plan including questionnaires and process templates
- Flexible assignment of process templates to requisitions
- Ranking of candidates via job-specific questionnaires
- Management of the content and format of job postings
- Linking the posting to multiple posting instances
- Management of publications

- **Central applicant tracking screen with**
  - **Overview of requisitions**
  - **Activity management (such as invitation to interview) for individual or all applicants (mass processing)**
  - **Prequalification and ranking of candidates**
  - **Workflow support for correspondence**

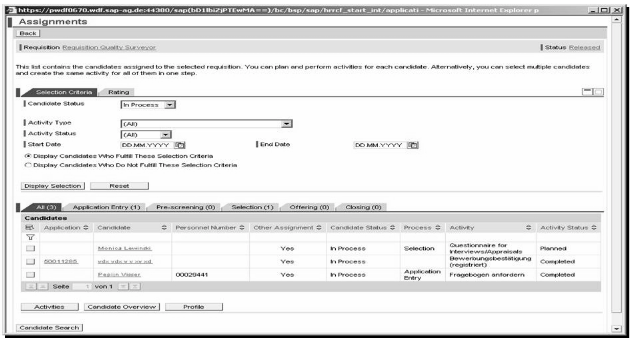

Figure 59: Recruiter: Applicant Tracking

The **Recruiter** provides tools to handle all administrative tasks in recruiting, thus supporting the entire recruitment process.

Ranking (the rating of candidates in terms of suitability) can be done with the help of search criteria and completed questionnaires. Online ranking and individual ranking is done by the recruiter.

A questionnaire is a compilation of questions to which a person (candidate, recruiter) replies as part of the Applicant Tracking Process.

The Application Wizard guides applicants/candidates through the various screens, where they can enter their application details.

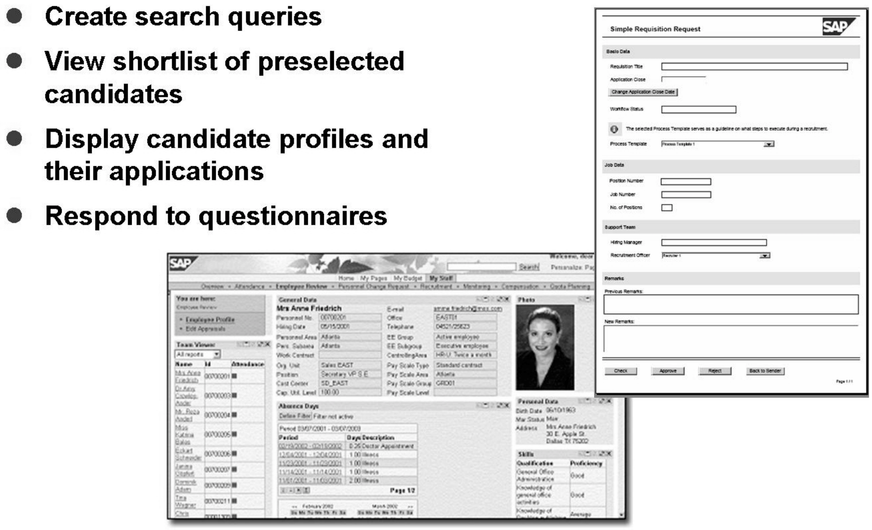

Figure 60: Manager Self-Service (MSS)

Managers can generate requisitions using special templates.

In the Recruiter, managers can view a shortlist of the candidates who have prequalified, and complete questionnaires.

They can view candidates' profiles and application documents.

They can respond to questionnaires (for example, from the HCM department) about candidates. They can invite the candidates for interviews or reject them.

Facilitated Discussion

Discussion Questions

Use the following questions to engage the participants in the discussion. Feel free to use your own additional questions.

What are the major differences between the Recruitment functionality in the SAP system and the E-Recruiting solution?

Lesson Summary

You should now be able to:

- Understand the basics of the E-Recruiting solution.

Lesson: Employee Data

78

Lesson Duration: 90 Minutes

Lesson Overview

In this lesson, you learn the basic facts about the various options for entering employee data.

Lesson Objectives

After completing this lesson, you will be able to:

- Maintain employee data

For more information, see the Instructor Guide in SAPNet.

Business Example

You are an employee in the HR department responsible for entering HR master data in the system.

Infotypes

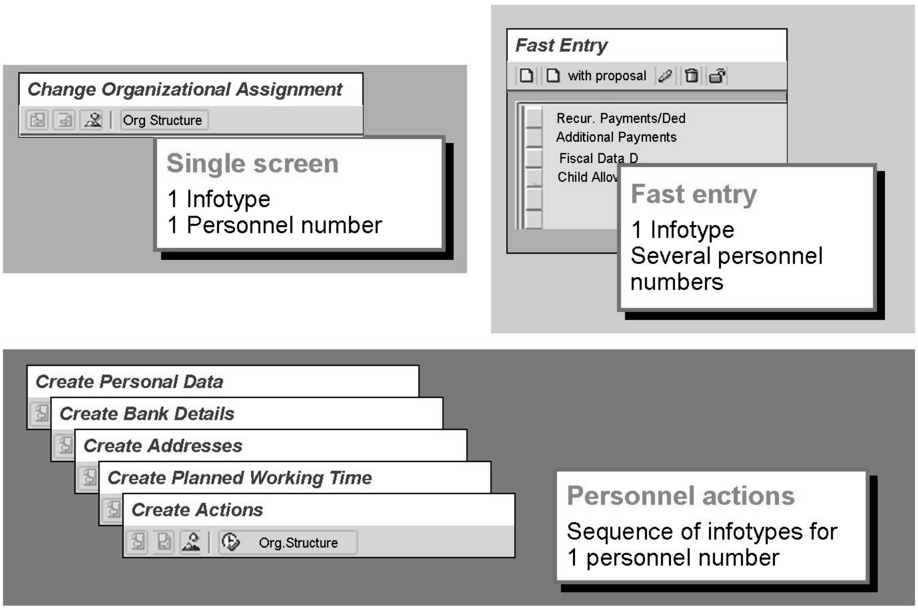

Figure 61: Maintaining Infotypes: Overview

Employee data must be kept current. Data can be displayed, corrected, and supplemented.

The mySAP ERP Human Capital Management system stores all employee data in infotype records. Each infotype record has a validity date. This is usually a validity interval or a key date.

There are three ways of processing infotype records: single-screen maintenance, personnel actions, or fast entry.

Single-screen maintenance
: You can call up individual infotypes to maintain data for a particular subject or situation. You maintain one infotype for one personnel number.

Personnel actions
: If the subject or situation is more complex and you need to maintain more than one infotype, you can use personnel actions. When you perform a personnel action, the system displays all of the relevant infotypes for you to maintain, one after the other.

Fast entry
: Fast entry enables you to maintain an infotype for multiple personnel numbers simultaneously.

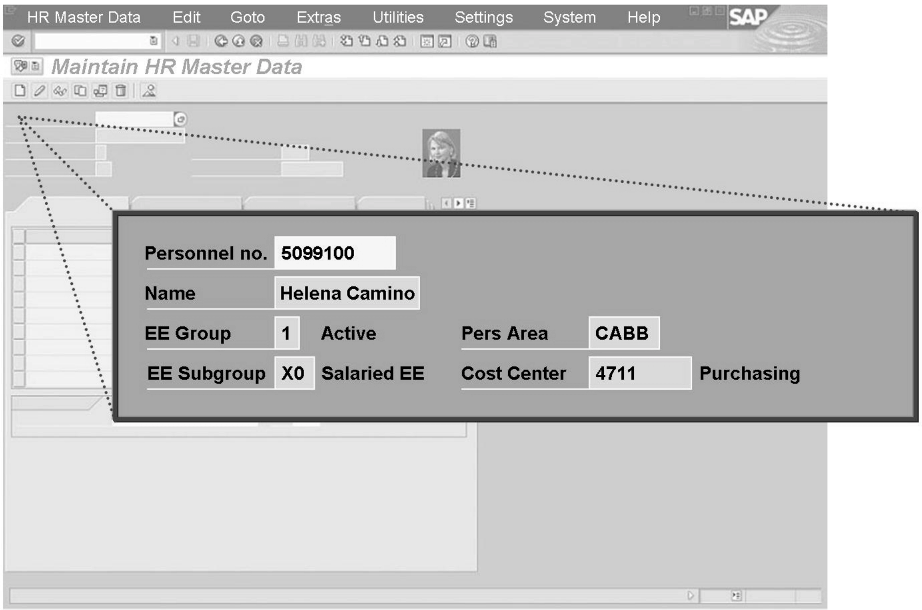

Figure 62: Initial Entry Screen for Infotype Maintenance

The personnel number is the only unique key within a client for identifying an employee. It is used to access the display and maintenance screens for an employee's master data and working time data (infotypes).

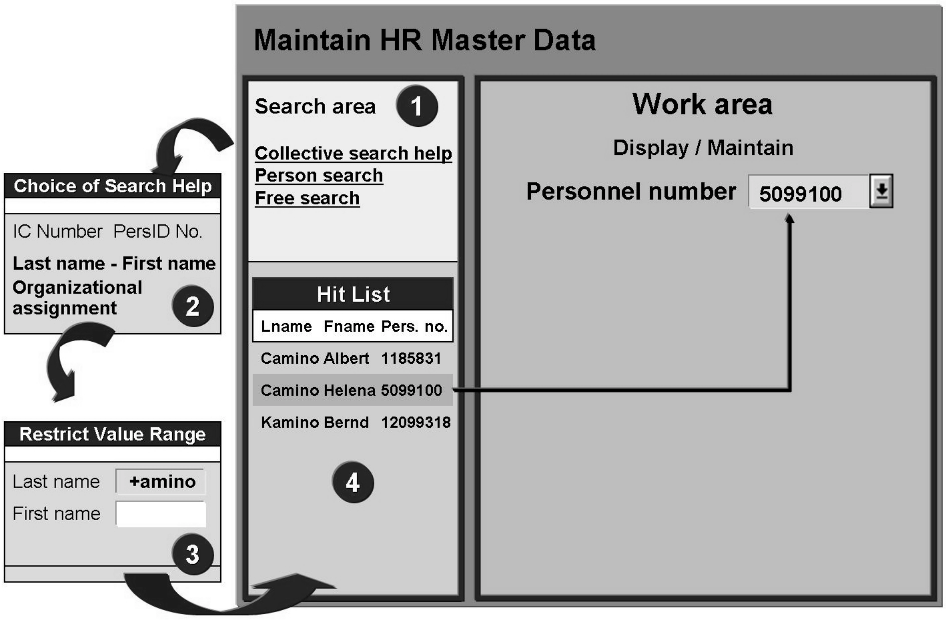

Figure 63: Search Help (1)

You must enter the personnel number to maintain the employee data for individual employees. If you do not know this number, you can use the search help to find it.

The search help function in the work area enables you to select personnel numbers according to certain criteria such as last name, first name, date of birth, organizational assignment, and so on. To search for a personnel number using the search help, proceed as follows:

1. Choose one of the search options from the search area.
2. You can now further define the type of search you want to use.
3. On the next screen, you can restrict the value range of the search.
4. The system displays a hit list of all the personnel numbers that match the selection criteria you entered in the selection area. Select the desired data record from the hit list.

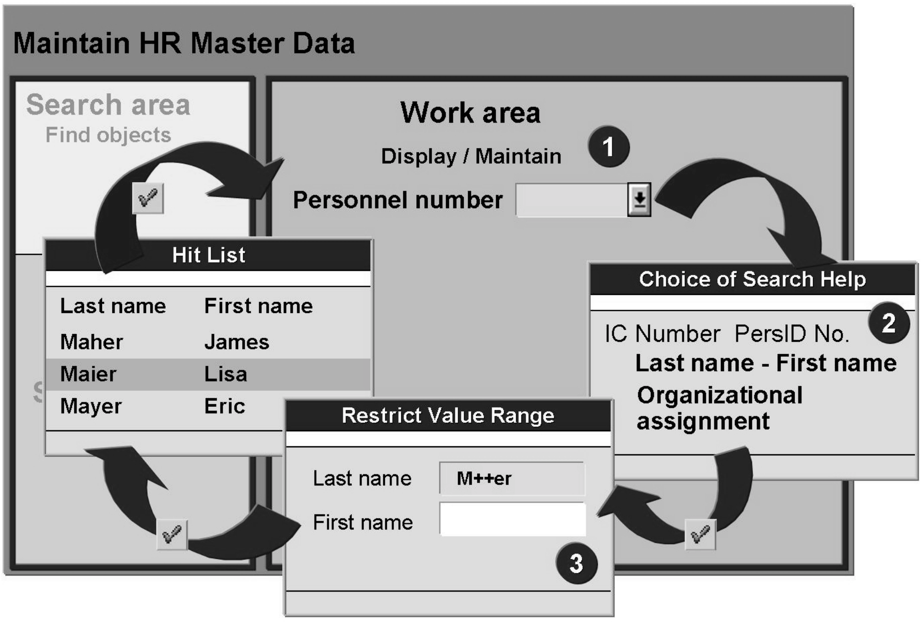

Figure 64: Search Help (2)

To maintain employee data for individual employees, the personnel number must be entered. If you do not know this number, you can use the search help to find it.

The search help function in the work area enables you to select personnel numbers according to certain criteria such as last name, first name, date of birth, organizational assignment, and so on. To search for a personnel number using the search help, proceed as follows:

1. Position your cursor on the personnel number entry field and double-click the arrow symbol or choose F4.
2. You may now select the type of search you want to use. You can switch to another type of search help at any point.
3. On the next screen, you can restrict the value search range.
4. The system displays a list of all the personnel numbers that correspond to your selection criteria. Select the desired data record from the hit list.

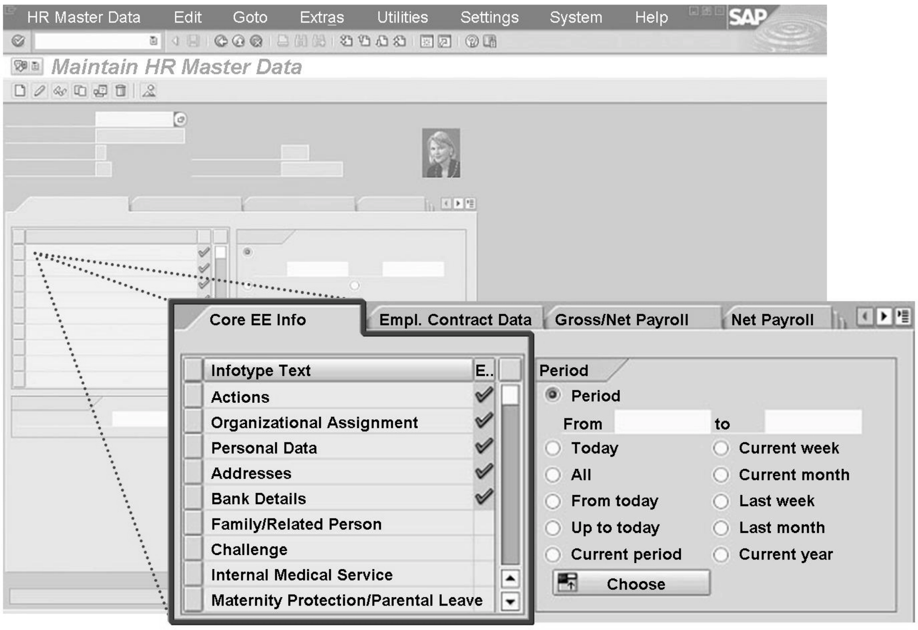

Figure 65: Initial Entry Screen for Infotype Maintenance

The infotypes that are used most frequently in mySAP ERP Human Capital Management are grouped together by subject matter and assigned to static menus. One infotype can be included in more than one menu. Infotypes that are rarely used, on the other hand, might not be included in any menus at all.

To access a particular menu, click on the tab page.

The green ticks next to the menu list of infotypes indicate that these records already exist for the selected personnel number.

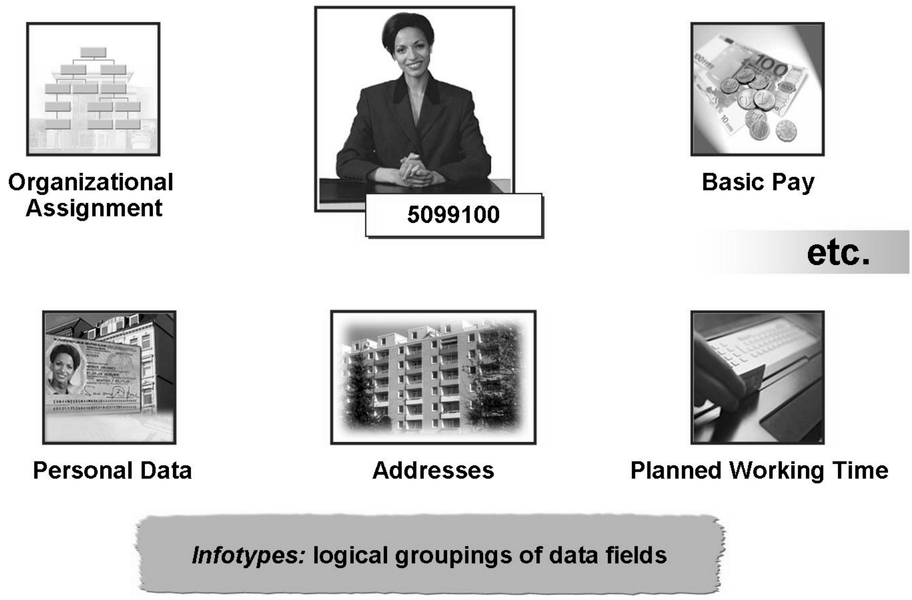

Figure 66: Infotypes

You enter individual employee data in entry screens. Entry screens are grouped as follows:

- Individual information, such as last name, first name, and date of birth, is defined in data fields.
- Data fields are grouped into data groups or information units according to their content. In mySAP Human Capital Management these information units are called information types or infotypes for short.
- Personal data is stored in logical groups. For example, place of residence, street, and house number make up the employee's address and are stored (together with additional data) in the Addresses infotype.
- Infotypes have names and 4-digit keys. For example, the *Addresses* infotype has the key 0006.

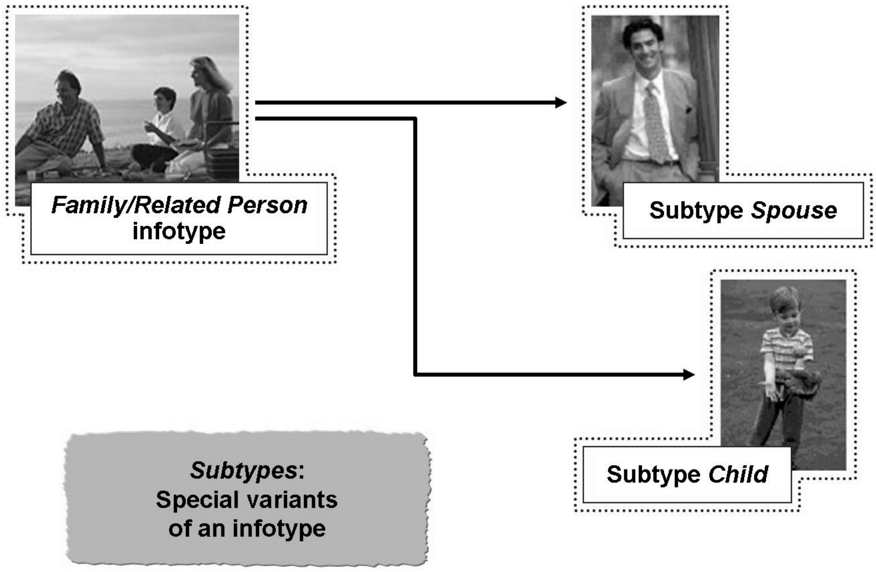

Figure 67: Subtypes of Infotypes

Subtypes are used to subdivide infotype data records. You may want to subdivide such information to make it easier to manage or because you want to assign different control features - such as time constraints - to the various subtypes of the same infotype. You can also create separate histories for each subtype.

In the Family Member subtype of the Family/Related Person (0021) infotype, you can store different family members:

- Spouse (subtype 1)
- Child (subtype 2)

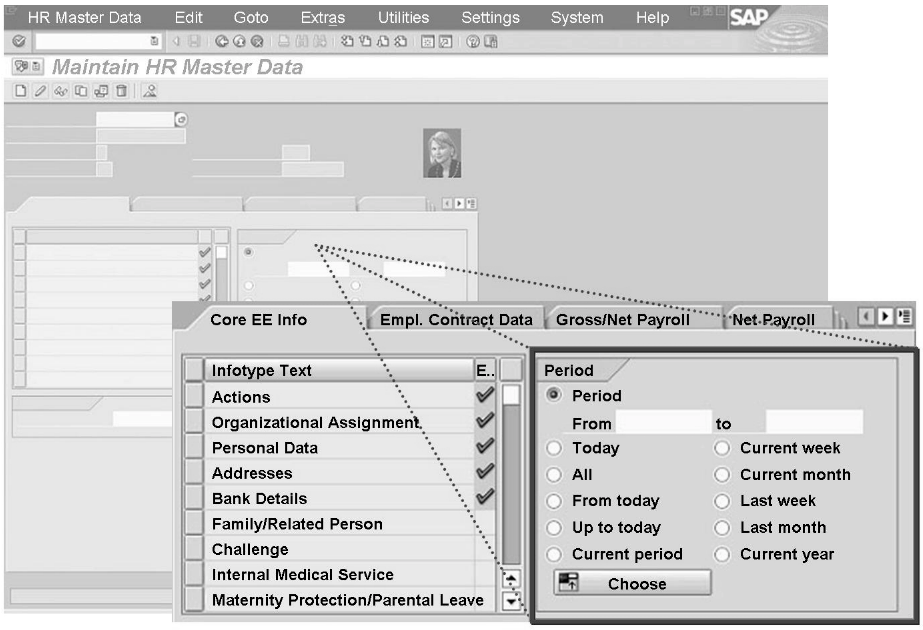

Figure 68: Initial Entry Screen for Infotype Maintenance

Data records are always stored in the system with a start date and an end date. This enables you to store data for exact periods.

When you select infotypes, you can specify a selection period in the displayed screen area.

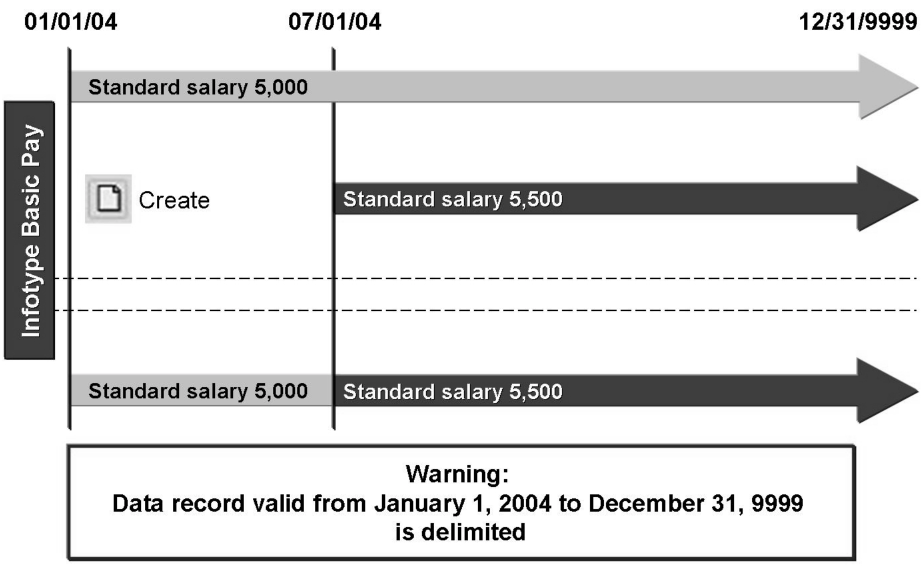

Figure 69: Generating Histories

If you create a new record when a previous record already exists, the system reacts in one of the following ways: it delimits, extends, splits, or deletes the record. The system's reaction depends upon the time constraint. The time constraint is a characteristic of infotypes and subtypes. In the master data, we differentiate between three different time constraints (1, 2, and 3).

Infotypes or subtypes with **time constraint 1** must be unique meaning that only one valid record can exist for any given time period. There can be no gaps between records.

When you add a new record to an infotype with time constraint 1, the system delimits the overlapping infotype record on the key date and adds the new record. This happens with the Basic Pay infotype (0008), for example. If you delete a record that must exist at all times, the previous record is automatically extended. There can be no gaps between records.

Infotypes or subtypes with **time constraint 2** can only have at most one record for a given time period. There can be gaps between records. If records overlap, the system adapts the previous record accordingly by deleting, dividing, or delimiting it. An example of an infotype with time constraint 2 is the subtype Spouse (1) in the Family/Related Person infotype (0021).

Infotypes or subtypes with **time constraint 3** can have gaps between records or overlapping records. If records overlap, the system does not react at all. Examples of infotypes with this time constraint are Monitoring of Dates (0019) and Objects on Loan (0040).

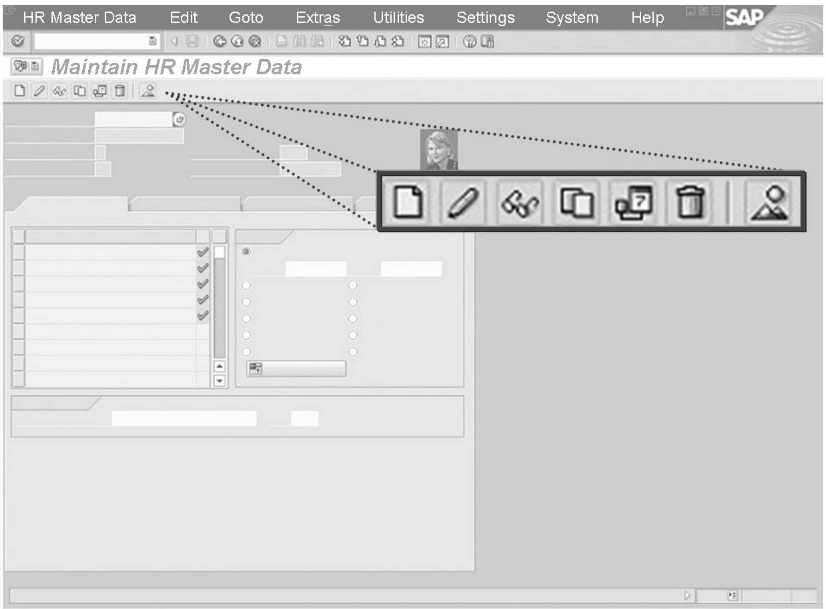

Figure 70: Initial Entry Screen for Infotype Maintenance

There are various processing options for maintaining master data.

The processing options for infotype records include:

- Create
- Change
- Copy
- Delimit
- Delete

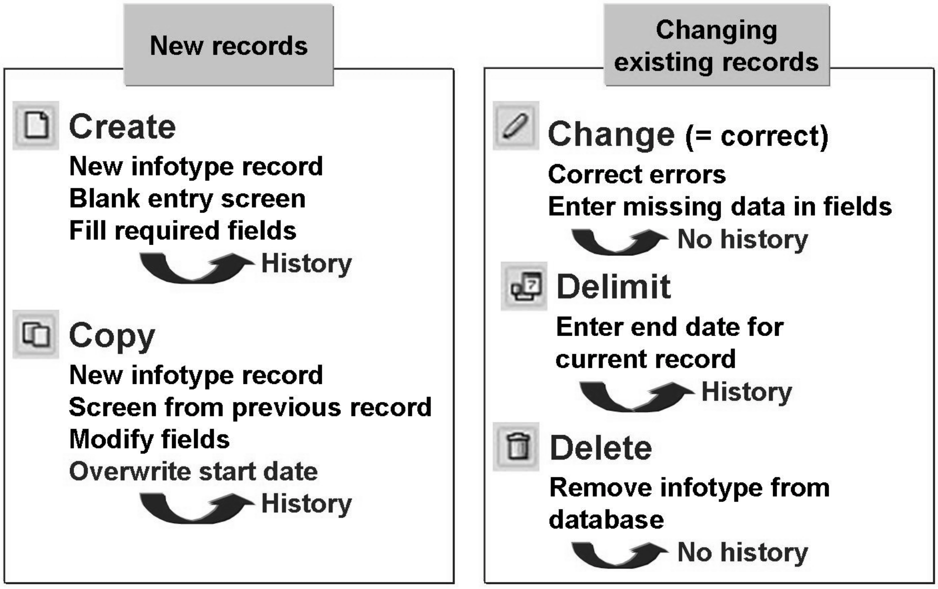

Figure 71: Maintaining Infotypes

Infotype maintenance means processing data already in the system, and entering and saving new data. You can change existing records and add new records for an employee.

Change

The Change function enables you to correct an existing record without creating a new one. It is used to overwrite existing infotype records, but not to create new infotype records. Changes to infotype records are not included in the history.

Create

The Create function enables you to enter new data. You create a new record while the old record, which may be delimited if necessary, remains in the system. The infotype history is created using the appropriate validity periods.

Copy

The Copy function enables you to create new infotype records, and it also updates the infotype history. Unlike the Create function, however, you do not enter your data on a blank entry screen. Instead, you use a screen containing the data that is currently valid. You can then overwrite these values.

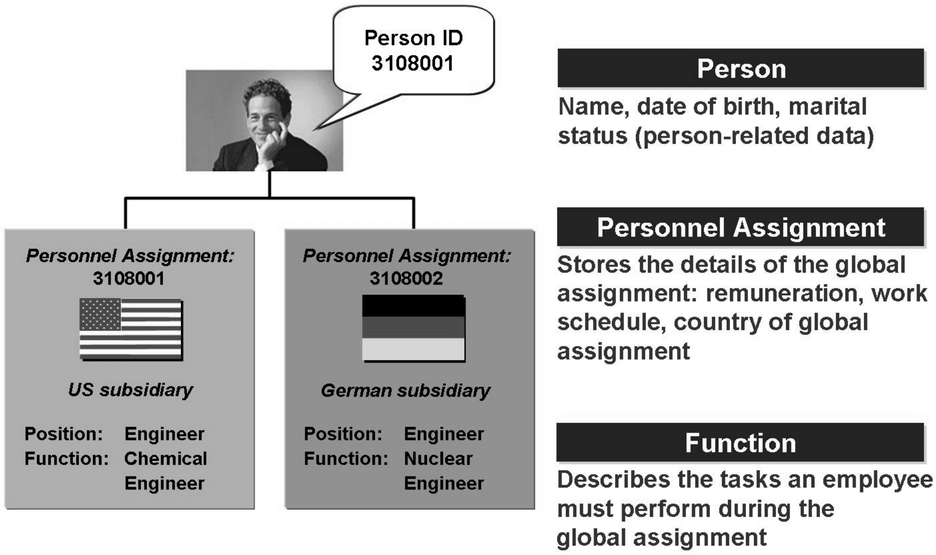

Figure 72: Hiring an Employee

The most important objective of master data administration in a Human Capital Management system is to enter employee-related data for administrative, time-recording, and payroll purposes.

A new employee can also be hired without using Recruitment. If you do not choose to use the functions in Recruitment, you can hire the employee using a personnel action in Personnel Administration. In such cases, data relevant to the new employee is created.

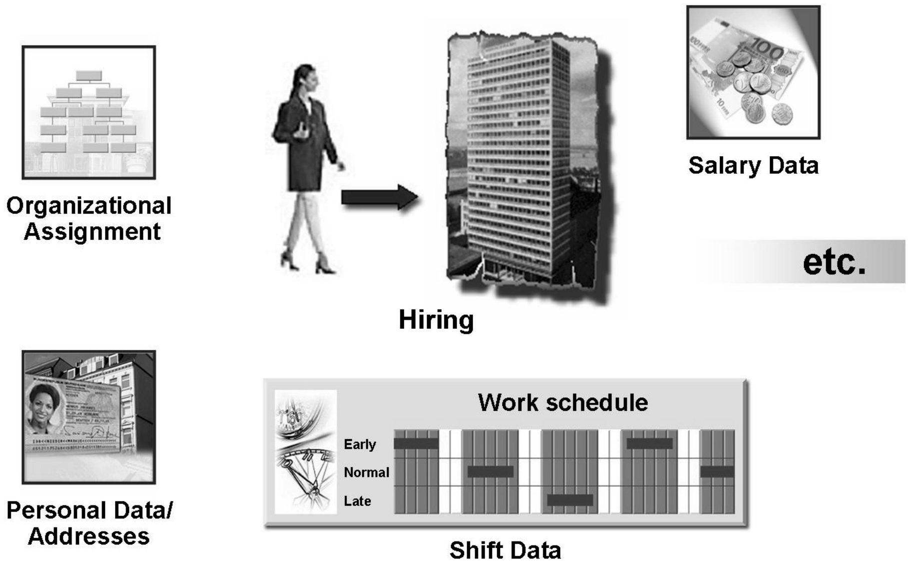

Figure 73: Hiring Action

A range of employee data must be entered into the system when an employee is being hired. You perform this personnel activity using the hiring personnel action, and enter all required data in the appropriate infotypes.

Once you have entered all the necessary data in an entry screen, you must save your entries. The system displays a new entry screen for processing. If you do not want to record any data here, then you can skip the screen.

Hint: You can customize personnel actions to suit your requirements in the Implementation Guide (IMG).

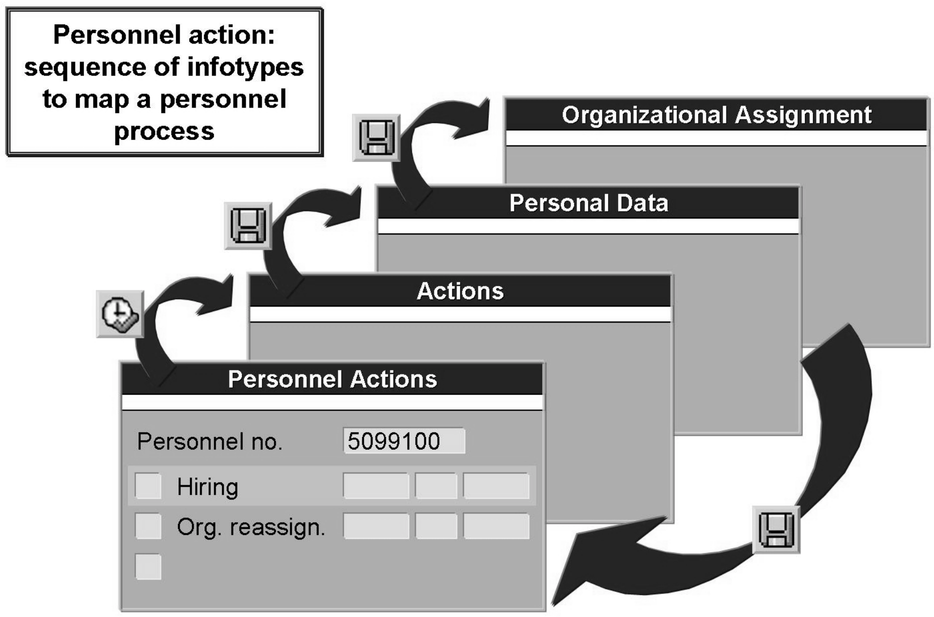

Figure 74: Entry Screens for Hiring

In general, during the hiring procedure, data is recorded for the above-mentioned infotypes. These infotypes, as well as the order in which they appear, can be customized to suit your company's requirements.

When you hire an employee, you must enter data in the following infotypes :

- **Actions (0000)**
- **Personal Data (0002)**
- **Organizational Assignment (0001)**
- **Addresses (0006)**
- **Planned Working Time (0007)**
- **Basic Pay (0008)**
- **Bank Details (0009)**
- **Absence Quotas (2006)**

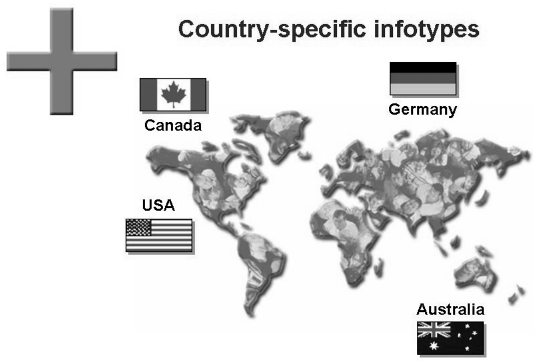

Figure 75: Digression: Concurrent Employment Model

Management of Global Employees is available as of SAP R/3 Enterprise - HR Extension 1.1.

A global employee can complete one or more global assignments for his or her global enterprise.

The Concurrent Employment Model in mySAP HCM describes the relationship between employee and employer. The most important concepts in the Management of Global Employees are:

- Each employee can have multiple personnel assignments, and each personnel assignment can be **in a different country**.
- Each personnel assignment is linked to the person.

The person ID enables you to keep track of the global employee in the whole enterprise throughout the duration of his or her assignment.

The person ID is stored in infotype 0709 “Person ID”.

A personnel assignment describes the tasks a person has to perform, the country of the global assignment, and other features. Therefore, each personnel assignment is assigned a unique personnel number in mySAP HCM.

Digression: Customizing

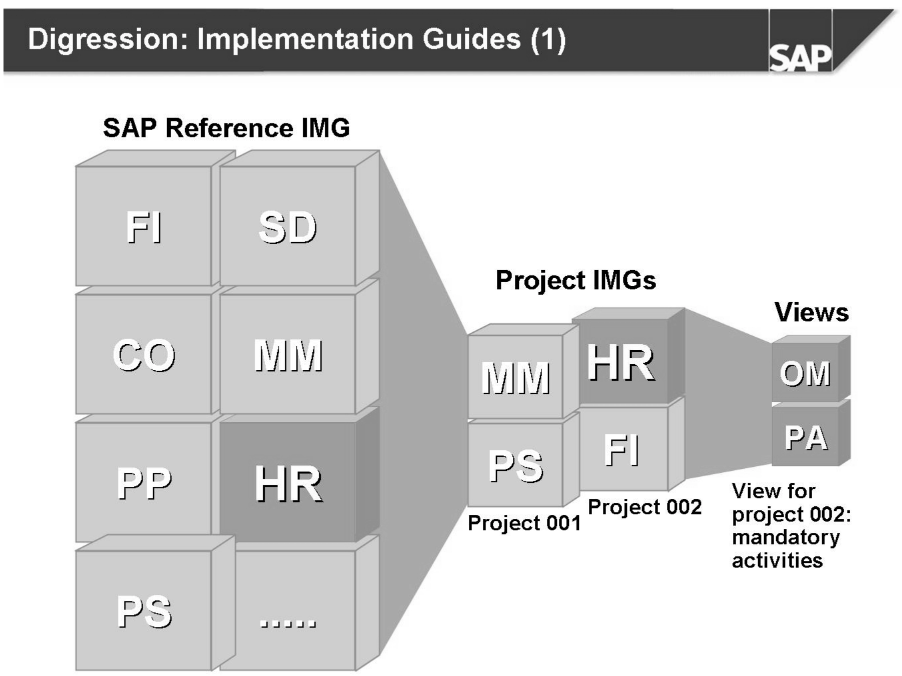

Figure 76: Implementation Guide (1)

The delivery system contains an SAP Reference IMG with all the Customizing settings for all R/3 components and all countries.

The Project IMG is created by selecting countries and application components based on the SAP Reference IMG. You can use the Project IMG to process Customizing steps, project documentation, and project management information.

You can create project views if you want to process the Project IMG more efficiently. You can also use project views to process Customizing steps, project documentation, and project management information. You can define attributes such as mandatory/optional/critical/non-critical as a basis for the views, or you can define your own views. Using views reduces the number of implementation steps.

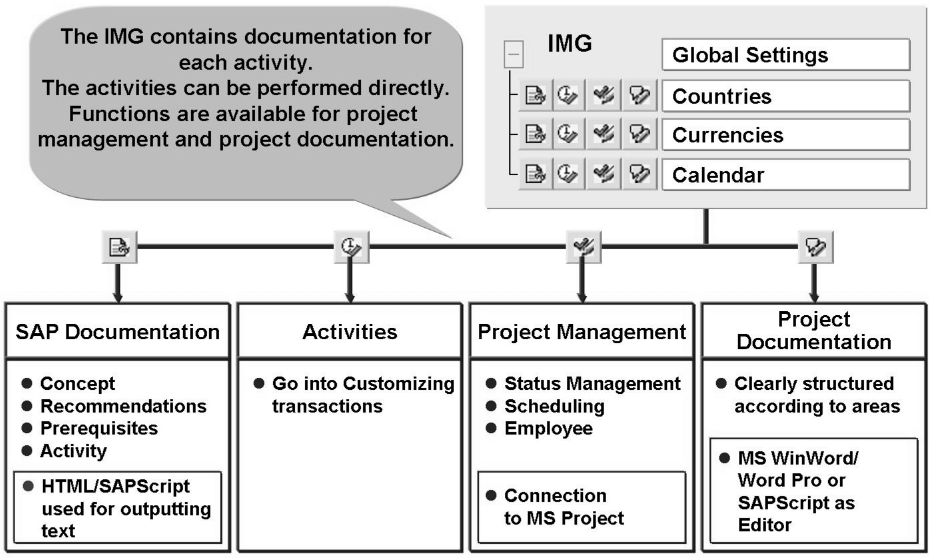

Figure 77: Implementation Guide (2)

In the SAP system, you can set up Customizing projects to help structure and manage implementation.

You can create and save cross-project documentation.

You can create a separate IMG for each project. A Project IMG provides you with a basis from which you can access Customizing transactions, project documentation, cross-project documentation, and information on project management.

93 Exercise 4: Employee Data

Exercise Duration: 10 Minutes

Exercise Objectives

After completing this exercise, you will be able to:

- Maintain HR master data
- Run personnel actions

Business Example

Your employees' data changes over time. These changes must be reflected in the Human Capital Management system.

Task:

1. To make your work easier, create favorites in the Easy Access menu for transactions *Maintain HR Master Data* and *Personnel Actions*.
2. Display the data on the planned working time of former applicant Lars Becker (personnel number: 111991##) and record the following values:

   Time Management status: ______________________

   Work schedule rule: ______________________
3. While checking Lars' data, you notice that an incorrect address has been entered. His street and house number should actually be 9750 Lilly Lane.
4. Map the following event using the *Change of Pay* personnel action. As of the first of the current month, Lars Becker is assigned to pay scale group E02 and pay scale level 01.

Solution 4: Employee Data

Task:

1. To make your work easier, create favorites in the Easy Access menu for transactions *Maintain HR Master Data* and *Personnel Actions*.

   a) In the Easy Access Menu, choose *Human Resources → Personnel Management → Administration → HR Master Data*.

   b) Position your cursor on the *Maintain* transaction and holding the left mouse key down, move the cursor to the Favorites menu option (at the top of the Easy Access Menu). Release the left mouse key.

   c) Do the same for the *Personnel Actions* transaction.

2. Display the data on the planned working time of former applicant Lars Becker (personnel number: 111991##) and record the following values:

Time Management status:	________________________
Work schedule rule:	________________________

   a) Call the transaction *Maintain* from your favorites or, in the Easy Access menu, choose *Human Resources → Personnel Management → Administration → HR Master Data → Personnel Actions → Maintain*.

   b) Enter *111991##* in the Personnel No. field.

   c) Select the *Empl. Contract Data* tab page and select the *Planned Working Time* infotype. You select an infotype by clicking on the box to the left of the infotype name.

   d) In the application toolbar, choose *Display*.

Time Management status:	no time evaluation
Work schedule rule:	NORM

   e) Choose *Back* to finish editing the infotype.

Continued on next page

3. While checking Lars' data, you notice that an incorrect address has been entered. His street and house number should actually be 9750 Lilly Lane.

   a) Select the *Core Employee Info* tab page and select the *Addresses* infotype. In the application toolbar, choose *Change*.

   b) Correct the address by entering the values specified in the exercise in the *House no./Street* field.

   c) Save your entries by choosing *Save*.

   d) Exit the *Maintain HR Master Data* transaction by choosing *Back*.

4. Map the following event using the *Change of Pay* personnel action. As of the first of the current month, Lars Becker is assigned to pay scale group E02 and pay scale level 01.

   a) Call the transaction *Personnel Actions* from your favorites or, in the Easy Access menu, choose *Human Resources → Personnel Management → Administration → HR Master Data → Personnel Actions*.

   b) In the *Personnel no.* field, check whether the value *111991##* has been entered.

   c) In the *Start* field, enter the first of the current month, select the *Change of Pay* action, and start the action by choosing *Execute*. The first infotype you need to maintain appears.

   d) Choose *Save* to save the *Actions* infotype, and confirm the delimitation of the existing infotype record by pressing *Enter*.

   e) In the *Basic Pay* infotype, enter *E02* in the *Group* field and *01* in the *Level* field. Confirm your entries and the subsequent warning message by pressing *Enter*.

   f) Save the infotype by choosing *Save*.

   g) Since you have now maintained all the required infotypes, the initial entry screen for personnel actions appears again.

Lesson Summary

You should now be able to:

- Maintain employee data

Lesson: Time Data

97

Lesson Duration: 60 Minutes

Lesson Overview

In this lesson, you learn the basics of Time Management.

Lesson Objectives

After completing this lesson, you will be able to:

- Explain the fundamental concepts of Time Management

For more information, see the Instructor Guide in SAPNet.

Business Example

You want to implement Time Management. Consequently, you want to acquire an overview of the core terms used in Time Management and of where the Customizing settings are stored in the system.

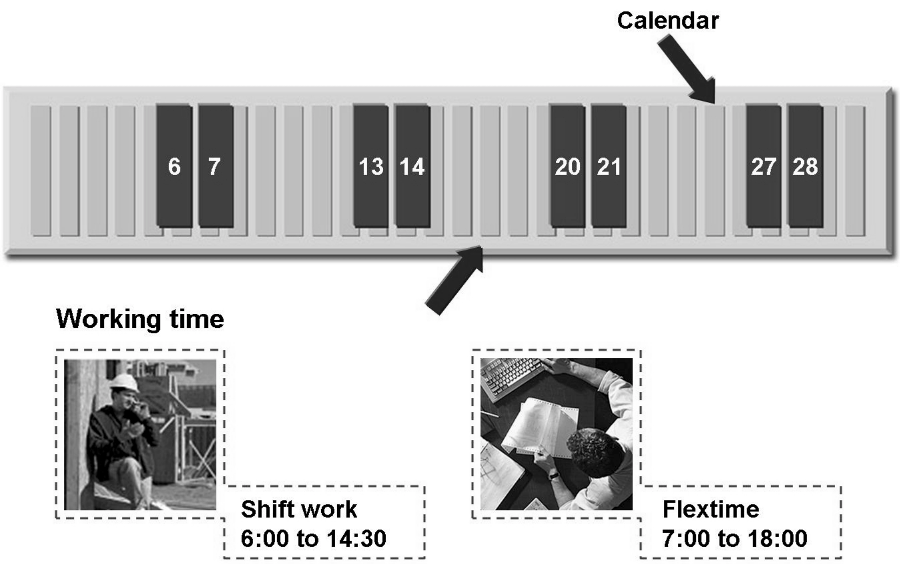

Figure 78: Work Schedule

The central element in time management is the employee's work schedule. The work schedule contains data on the employee's planned working time.

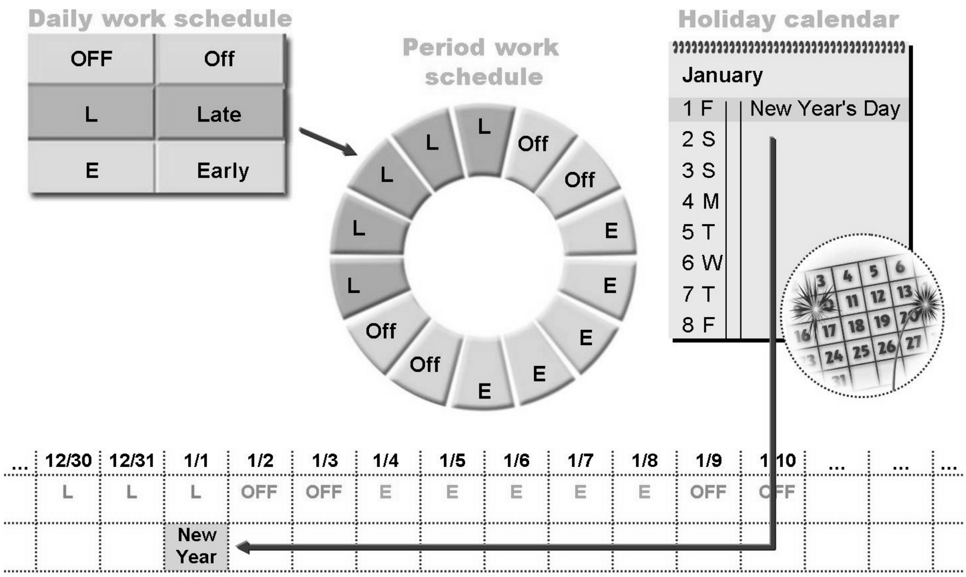

Figure 79: Work schedule

An employee’s planned working time is represented in a work schedule. The work schedule is created from a period work schedule and a public holiday calendar. The period work schedule comprises a set sequence of daily work schedules. The daily work schedule contains information on a day's working time including breaks. The sequence can reflect regular and variable working times. The period work schedule is applied to the public holiday calendar. The work schedule rule encompasses all the specifications required to define the work schedule.

The work schedule is used as the basis for time data evaluation.

You assign a work schedule to an employee in the **Planned Working Time infotype (0007)** using work schedule rules.

You define work schedules in Customizing.

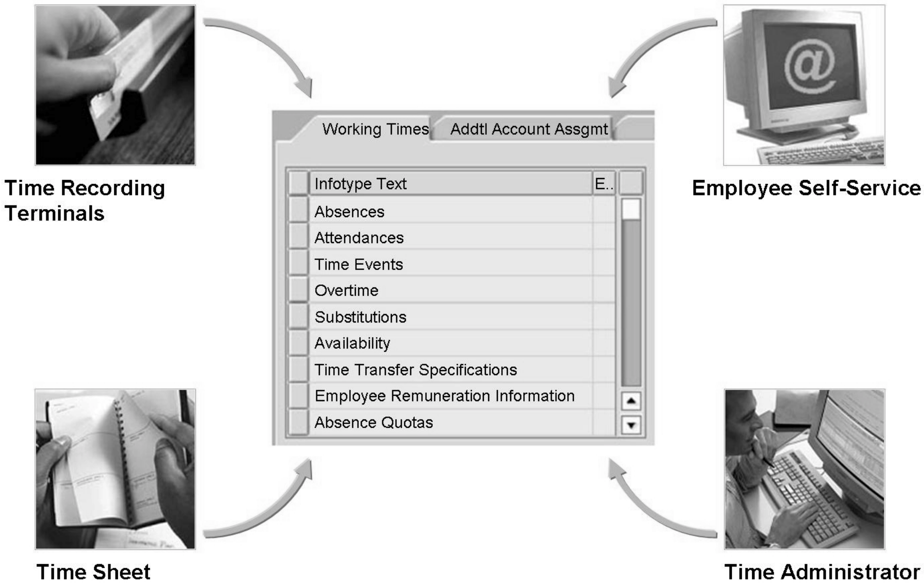

Figure 80: Recording Data in Time Management

To record employee times in *Time Management*, such as hours worked, business trips, leave, or changes to planned working time, you can use a variety of systems and methods, such as:

- Online by time administrators
- Front-end time recording systems
- Using the SAP Cross-Application Time Sheet (CATS)
- Employee Self-Service (ESS) applications, Internet applications, Workflow forms, or touch-screen systems
- Customer systems with an interface to the SAP system

Time data, such as listed above, is stored in infotypes. A **time administrator** records this data in various ways:

- Time Manager's Workplace (TMW): Administration of data for a group of employees
- Maintaining individual infotypes: Recording and changing data on infotype screens
- Fast data entry: Simultaneous entry of infotype data for multiple employees

Course bookings are recorded as attendance records in Time Management.

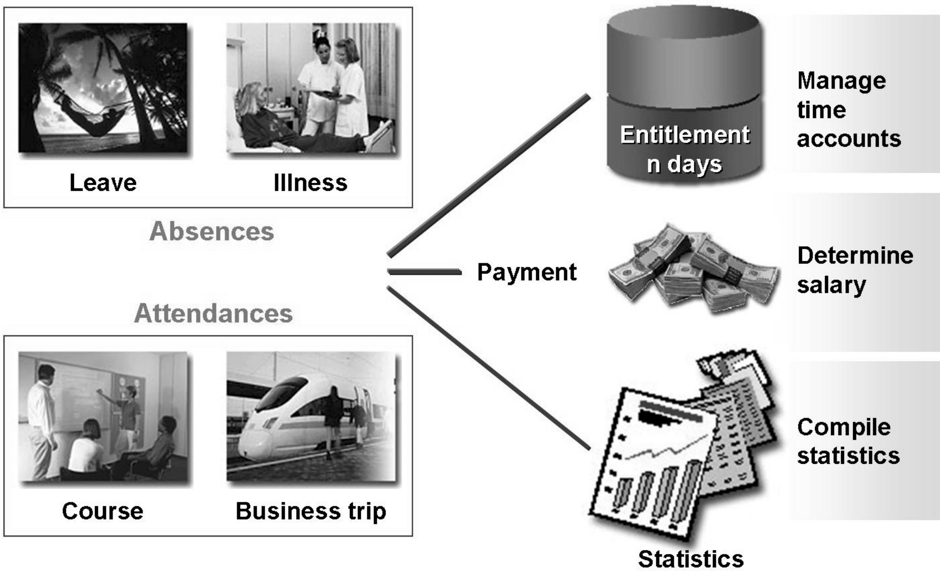

Figure 81: Attendances/Absences

Employee attendances can be business trips, participation in seminars, hours worked, or teaching a training course, for example. Attendances are recorded in the Time Manager's Workplace using the corresponding time data IDs. The information is stored in the *Attendances* infotype (2002), which is subdivided into various attendance types (subtypes).

Examples of employee absences are illness or leave. Absence data is calculated on the basis of an employee's personal work schedule. The information is stored in the *Absences* infotype (2001), which is subdivided into various absence types (subtypes).

Attendances and absences can be partial-day, full-day, or for several days.

Attendances and absences can be deducted from entitlements, known as quotas. Examples of quotas are annual leave, approved overtime, or further training entitlement. Some attendances and absences can influence an employee's remuneration; others have a purely statistical function.

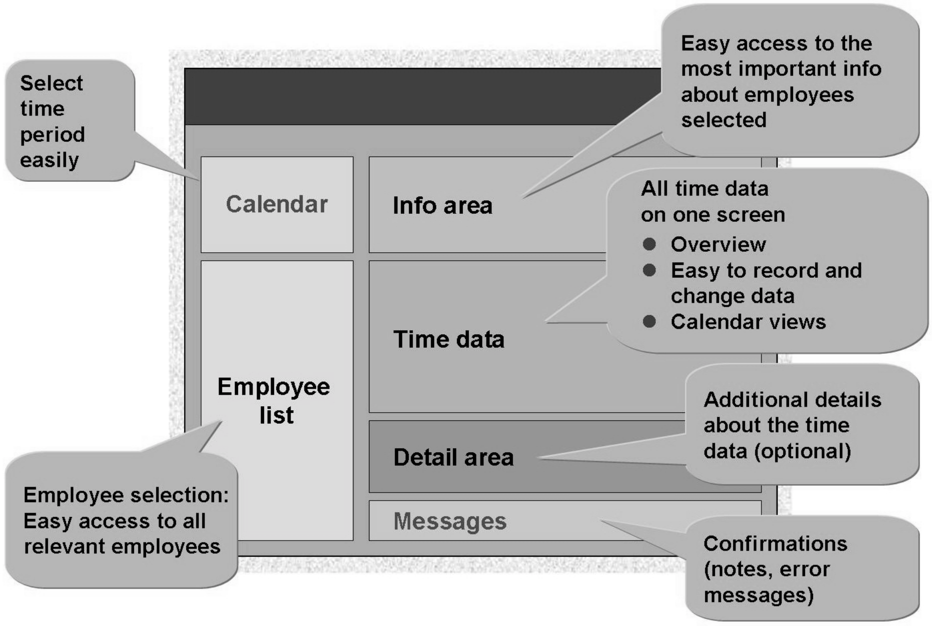

Figure 82: Layout and Screen Areas of the TMW

The **calendar** is used to select the period for which time data is to be entered.

The employees assigned to the time administrator are listed in the **employee list**. Administrators can select employees from the list for whom they want to record or change time data.

They can display additional information (such as master data or time accounts) about an employee in the **Info Area**.

In the **Time Data** area, time administrators enter and maintain time data using intuitive time data IDs (such as "ILL" for illness or "LV" for leave).

Any further details necessary (such as activity allocation data for an attendance) can be entered in the **Details** area. Information on time data recorded is also visible in the Details area (person who entered the data, date on which data was entered, and so on).

The **Messages** area contains any messages or confirmations on time data entered by the time administrator. These are output in the form of error messages, warnings, or information.

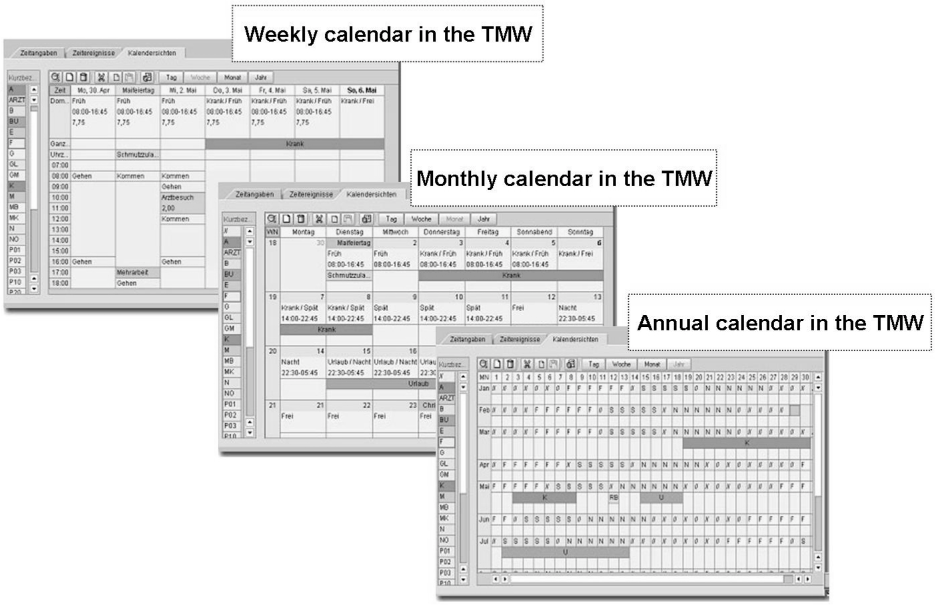

Figure 83: Calendar Views in the TMW

The calendar view is new in the time data maintenance area of the TMW. It provides a graphical overview of a person's time data. A daily, weekly, monthly, and annual calendar are available.

This enables you to gain a quick overview of a specific period. The use of colors for the time data IDs enables you to quickly differentiate different types of time data.

You can also maintain data in this view. The color-coded time data IDs are displayed in a bar to the left of the calendar. You can drag and drop them to the required days. If required, you can copy and paste the calendar entries. (Example: recurring attendances or absences can be copied to the relevant days.)

Because they work in a similar way to well-known PC applications (such as Microsoft Outlook), the calendars are very easy to handle.

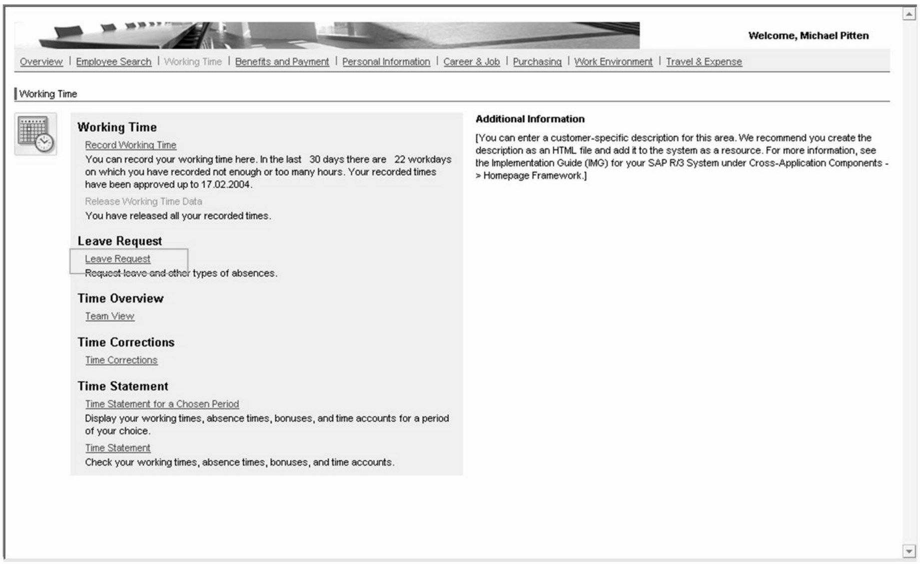

Figure 84: ESS Leave Request

The starting point for this Employee Self-Service application is the *Working Time* area page. The applications are displayed on the left as links. To access the Leave Request in the example, you would choose the link that is highlighted.

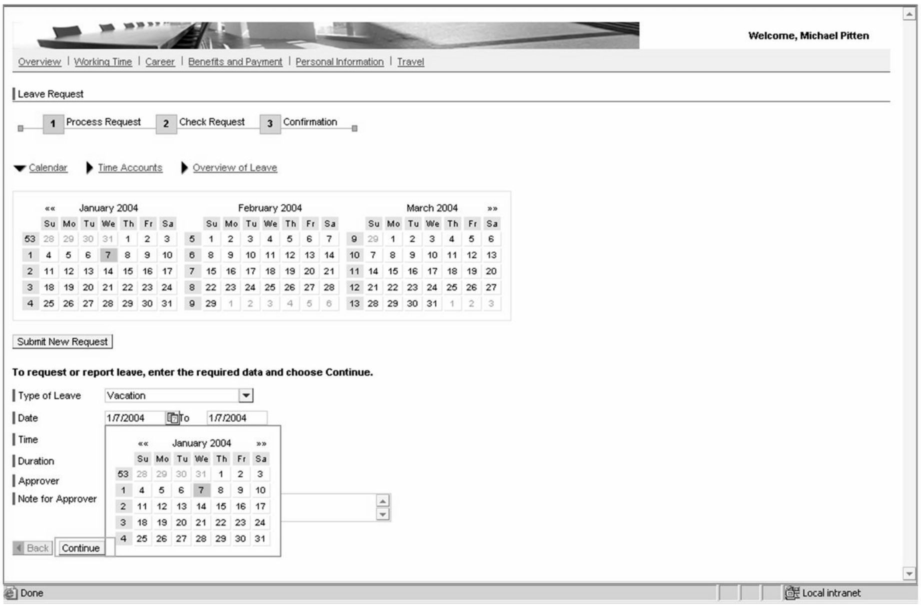

Figure 85: ESS Leave Request: Data Entry

In the calendar view, you enter the required data for the leave request. After you confirm the data, it is displayed again for you to check.

After you enter data, it is displayed once again for you to check and, if necessary, amend. Once you confirm the data, it is forwarded on for approval.

After confirmation, the data is forwarded to the manager responsible for approval. An information message is displayed for confirmation.

The Overview of Leave gives employees detailed information about the leave they have requested. Employees can also cancel their leave if required. If they do cancel, an additional workflow is triggered.

Facilitated Discussion

Discussion Questions

Use the following questions to engage the participants in the discussion. Feel free to use your own additional questions.

Lesson Summary

You should now be able to:

- Explain the fundamental concepts of Time Management

Lesson: Employee Self-Service (ESS)

106

Lesson Duration: 30 Minutes

Lesson Overview

[Give a short overview of the lesson.]

Lesson Objectives

After completing this lesson, you will be able to:

- Describe Employee Self-Service

[Describe which information the instructor should provide to participants about the context of the course.]

Business Example

[Explain to participants about the practical use of this lesson for a company using a business example.]

SAP Enterprise Portal

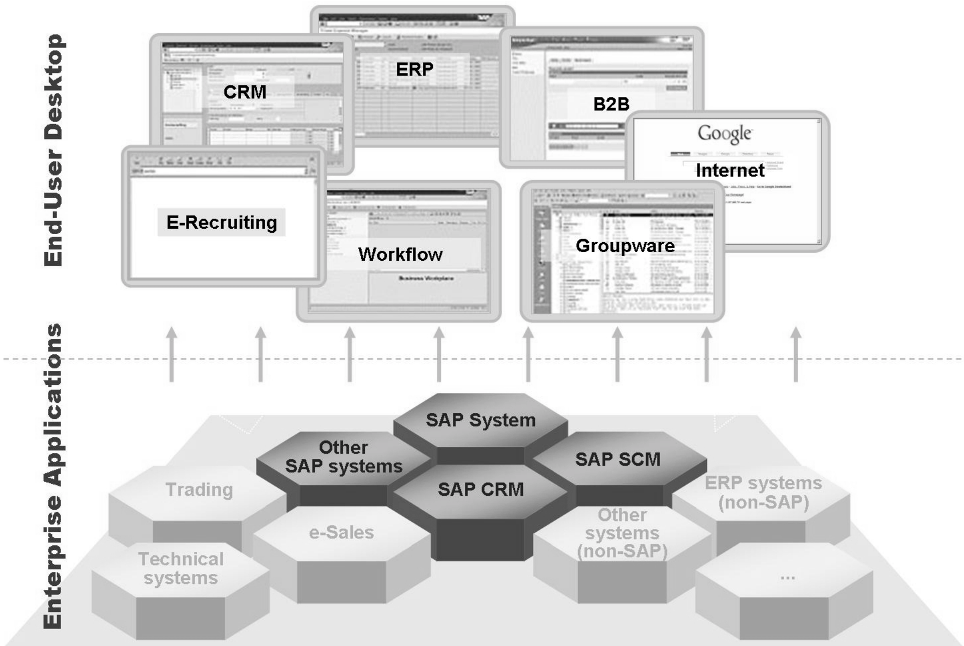

Figure 86: Challenge - Too Many End-User Interfaces

The e-Business era has often resulted in companies having very complex IT landscapes. These include different applications, services, and information.

Users need access to the various services to perform their tasks. Access is usually through special programs on the desktop and different logons.

In many companies today, the end user is thus confronted with a range of different interfaces for various applications, each of which operates differently.

The SAP Enterprise Portal meets this challenge by integrating these various interfaces in one interface.

The target group is not limited to the employees of a company - with an external portal you can also reach business partners, customers, or any interested parties.

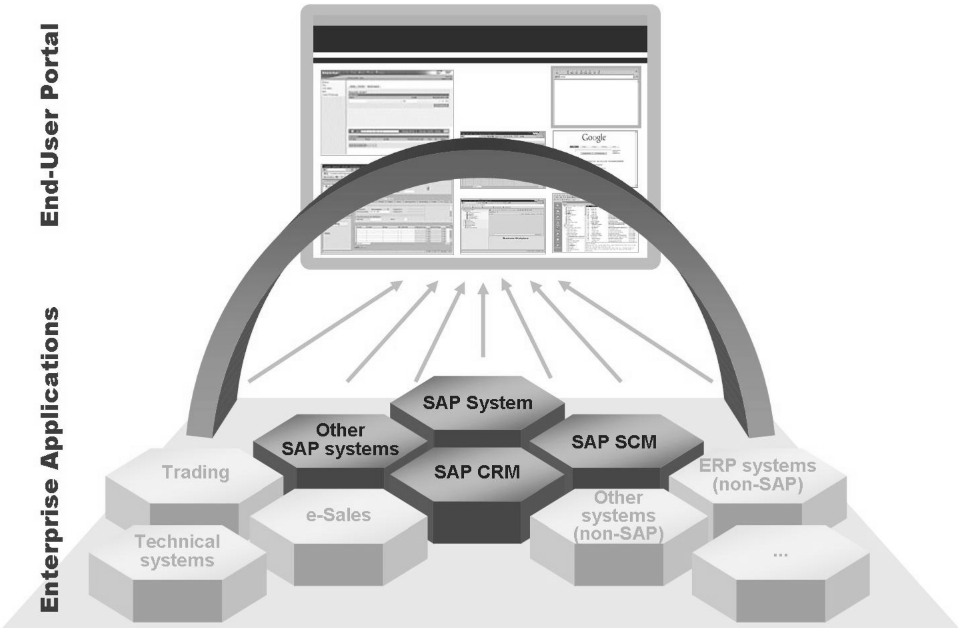

Figure 87: Single-Sign-On in the SAP Enterprise Portal

The Enterprise Portal displays different information from several sources (SAP systems) on one page. The use only needs to log on once to the Enterprise Portal. The Enterprise Portal automatically logs the user on to any other systems for which a suitable user and password has been saved for the user or for which a Trusted Systems Link can be used.

- **<u>The Enterprise Portal provides a central point of access for all applications and systems.</u>**
- **Only one portal is required for all applications and users.**
- **Provides more than just access to all systems:**
  - Content Management (store internal documents, make groups accessible)
  - Set up Collaboration Rooms for work groups for a subject
  - Incorporate screen areas from many different systems on one page

Figure 88: Advantages of an Enterprise Portal

Summary: mySAP Enterprise Portal offers a central point of access for all applications, business intelligence functions, documents, and Web services at a company. Users play a central role. They can draw on information from various sources and work together with internal and external colleagues. Furthermore, each portal is organized in such a way that it provides an optimized work environment that enables users to recognize business opportunities quickly and solve problems. In short, the portal is a user-oriented platform for enterprises and their business partners.

- **Heavy workload caused by administrative and repetitive tasks in the personnel department**
- **Business processes carried out informally or on paper**
- **Data entered several times and processed further by:**
  - Employees
  - Supervisors
  - IT administrators
- **RESULT:**
  - Low-quality and redundant data
  - Inefficiency
  - Overloaded HR department

Figure 89: HR Work Without Employee Self-Service

- SAP Employee Self-Service (SAP ESS) comprises multiple intuitive Web applications to enable employees to create, edit and display data in SAP systems using a browser.
- SAP ESS covers the following areas, for example:
  - Office
  - Working time
  - Business trips
  - Benefits
  - Jobs
  - Payment
  - Personal data
  - Courses
  - Qualifications
  - Appraisals
  - Life and work events

Figure 90: What is SAP Employee Self-Service?

SAP ESS is an efficient means of accessing and maintaining data in real time. It allows you to outtask data entry activities and related tasks that are usually performed in a company's human resources, payroll, benefits and travel departments.

SAP Employee Self-Service (SAP ESS) enables employees to view, create and maintain data at any time, anywhere, using their Web browser.

SAP ESS has an intuitive interface and is therefore ideal for occasional users. SAP ESS has various services for different subject areas.

ESS development is currently focusing on so-called Life and Work Events in which applications and information are combined to provide employees with support in decision-making processes.

"Let them do it themselves!"

- Employees maintain their own data
- Employees are responsible for some of their personal data
- Information is provided for all employees
- Simple and intuitive to use

Figure 91: SAP ESS - The Philosophy

Employees can use SAP ESS to:

- Search the Who's Who
- Look in their calendar
- Check workflow work items
- Submit travel expenses
- Enter their working times
- Enroll for benefits

Employee information can be obtained using SAP ESS:

- Personal data (payroll, time management, travel expenses, qualifications, and so on)
- "Public" information (Who's Who, calendar, education and training offers, internal vacancies, and so on)

SAP ESS is easy and intuitive to use.

Figure 92: Personal Data

Employees can maintain their own address data. This includes the permanent residence, temporary residence, and home address (Addresses infotype (0006)). You can determine the address types you want employees to be able to maintain in SAP ESS in Customizing.

Employees can enter their bank details to enable their salary to be transferred directly and expenses to be refunded (Bank Details infotype (0009)).

Employees can enter a contact address in case of emergency (Addresses infotype (0006), Emergency Address subtype (4)).

Employees can enter a contact person in the event of an emergency (Family/Related Person infotype (0021), Emergency Contact subtype (7)).

Employees can enter information about family members and related persons for use in the Benefits service.

Employees can display and change personal information (Personal Data infotype (0002)). Employees can use the Previous Employers function to enter, display, and change information about employers for whom they worked before working for their current employer. (Other/Previous Employers infotype (0023)).

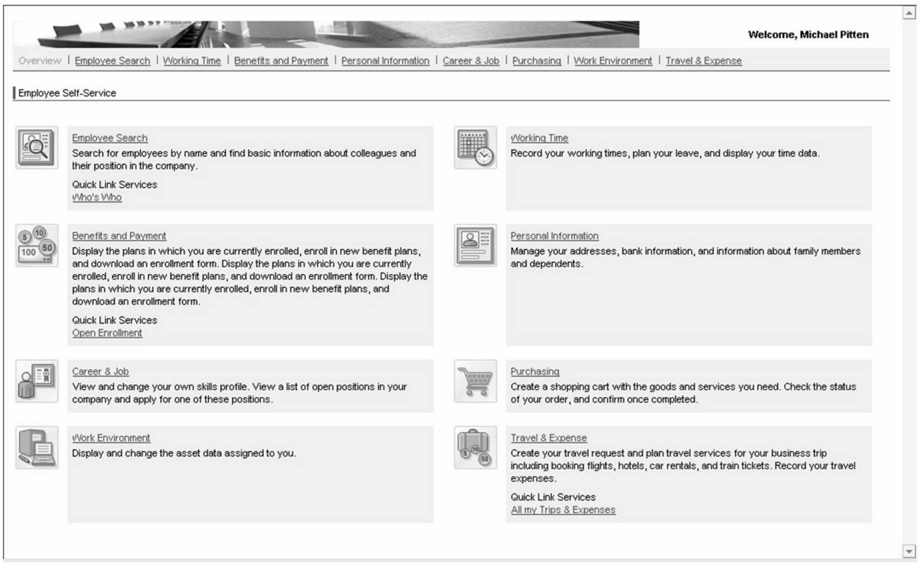

Figure 93: ESS Homepage

The homepage is the Employee Self-Service start page. The end user can call various information from here. For example, the user can start the service to change his or her address data.

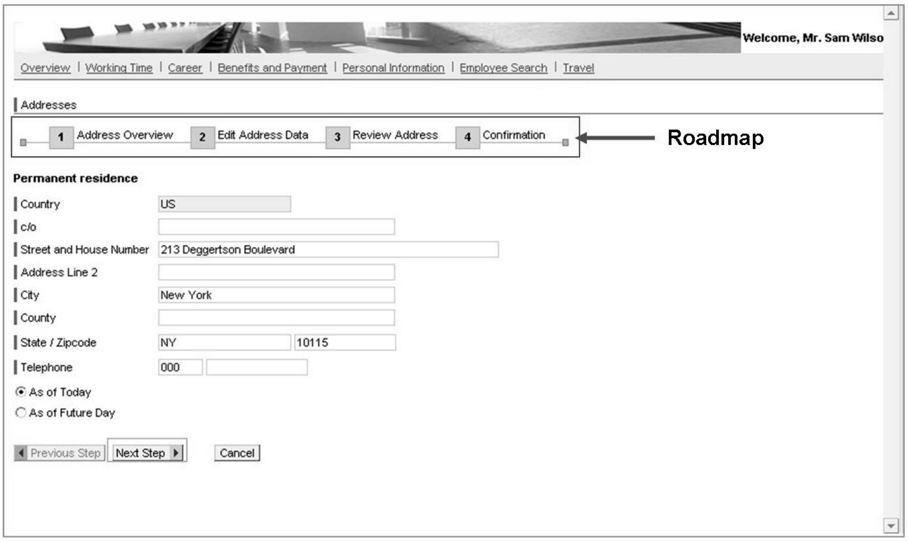

Figure 94: ESS Service: Personal Data - Change Address

The graphic shows an example of the Personal Information service. The employee wants to change his or her address. The employee is guided through the individual steps of a roadmap. The fields to be maintained are displayed in screens that are easy to understand. When the employee saves the changes, the changes also take effect in the connected mySAP ERP system. During processing, the employee's personnel number is locked in the mySAP ERP system. The system message “Data has been saved” also refers to the data in the SAP system.

Hint: You will find information about the new HR Administrator role and the Employee Interaction Center in the appendix.

Facilitated Discussion

Discussion Questions

Use the following questions to engage the participants in the discussion. Feel free to use your own additional questions.

Facilitated Discussion

Discussion Questions

Use the following questions to engage the participants in the discussion. Feel free to use your own additional questions.

Lesson Summary

You should now be able to:

- Describe Employee Self-Service

Related Information

- Use a URL or cross-reference tag to point out additional information that the participants may find useful, such as Web sites or white papers. Delete this if not applicable.

Unit Summary

You should now be able to:

- Explain the recruitment process
- Understand the basics of the E-Recruiting solution.
- Maintain employee data
- Explain the fundamental concepts of Time Management
- Describe Employee Self-Service

115

Test Your Knowledge

1. A vacancy

   Choose the correct answer(s).

   □ A Is a job that is not occupied.
   □ B Is a position that has multiple holders.
   □ C Is a position that needs to be filled.

2. The E-Recruiting solution enables you to recruit English-speaking employees.

   Determine whether this statement is true or false.

   □ True
   □ False

3. A series of infotypes for a personnel number is called a ________________. When you perform a ________________, the system displays all of the relevant infotypes for you to maintain, one after the other.

   Choose the correct answer(s).

   □ A Fast entry
   □ B Personnel action
   □ C Single-screen maintenance

4. Where is an employee's work schedule stored?

   Choose the correct answer(s).

   □ A In the Optional Working Time infotype.
   □ B In the Planned Working Time infotype.
   □ C In the Normal Working Time infotype.
   □ D In the Monitoring of Tasks infotype.

5. You create the Time Management infotypes Illness, Leave, Seminar Participation, and Business Trips using the absence transaction.

   Determine whether this statement is true or false.

   □ True
   □ False

116

Answers

1. A vacancy

   Answer: C

   Vacancies are positions that need to be filled (either completely or partially). For positions to be included in the recruitment process, they must be flagged as vacant.

2. The E-Recruiting solution enables you to recruit English-speaking employees.

   Answer: False

   E-Recruiting is a complete solution for recruitment and all of the functions are Internet-compatible.

3. A series of infotypes for a personnel number is called a ________________. When you perform a ________________, the system displays all of the relevant infotypes for you to maintain, one after the other.

   Answer: B

4. Where is an employee's work schedule stored?

   Answer: B

   You assign a work schedule to an employee in the Planned Working Time infotype (0007) using work schedule rules.

5. You create the Time Management infotypes Illness, Leave, Seminar Participation, and Business Trips using the absence transaction.

   Answer: False

   Employee attendances include business trips or attendance at seminars; absences include leave and illness. Attendances are stored in Time Management in the Attendances infotype (2002), which is divided into multiple attendance types (subtypes). Absences are stored in Time Management in the Absences infotype (2001). It is also divided into different subtypes. The time administrator can also use the Time Manager's Workplace (TMW) to record time events.

Unit 3

117

Education and Training

For more information, see the Instructor Guide in SAPNet.

Unit Overview

- Profile Matchup
- Course Registration
- Appraisals

Unit Objectives

After completing this unit, you will be able to:

- Explain the profile matchup
- Book an employee for a business event
- Explain the Learning Solution.
- Understand the appraisal process including objective settings

Unit Contents

Lesson: Profile Matchups

118

Lesson Duration: 30 Minutes

Lesson Overview

In this lesson, you learn about the data that forms the basis for profile matchups. You also learn how to run profile matchups.

Lesson Objectives

After completing this lesson, you will be able to:

- Explain the profile matchup

For more information, see the Instructor Guide in SAPNet.

Business Example

Your company uses profile matchups as a tool to support personnel development processes.

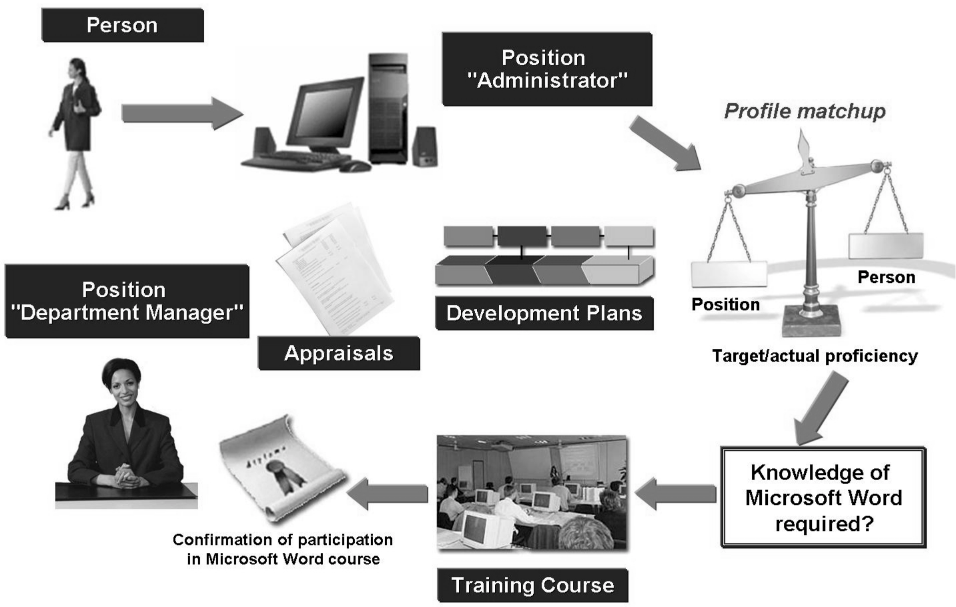

Figure 95: Personnel Development and Qualifying Actions

In the Personnel Development component, you can plan and implement specific personnel and training measures to promote the professional development of your employees.

The personnel development needs in an enterprise are determined by comparing current and future working requirements with existing skills, qualifications and development preferences of the employees. These development measures might be geared toward an employee being transferred to a specific post (using career and succession planning scenarios). They might also be more general measures geared toward retaining or enhancing existing employee skills and abilities, or ensuring that employees keep pace with technological developments.

Qualifying actions (such as training courses or job rotation) can be grouped into development plans (for example, a trainee program for sales staff). Such development plans are referred to as general development plans since they apply to all employees. These general development plans can be tailored to the needs of individual employees.

The performance and conduct of employees can be appraised. The appraisal results can provide input for planning an employee's further career development. You can also maintain objective setting agreements.

Requirements
List of skills, abilities, and experience required to be suitable for a job, position, task, or work center

Qualifications
List of skills, abilities, and experience an employee has to make them suitable for a job, position, task, or work center

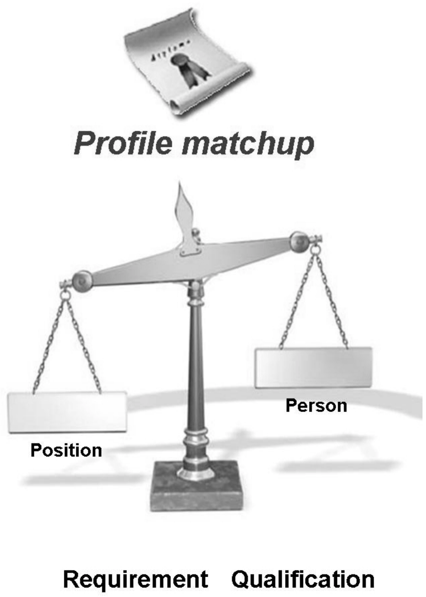

Figure 96: Qualifications/Requirements

You can assign qualifications to employees and positions, for example. However, if a qualification is assigned to a job or a position, it is referred to as a “requirement.”

All qualifications (and requirements) are stored in a central catalog. Both refer to the same object but from a different perspective.

This means that you can compare the qualifications of a person with the requirements defined for a position.

You edit the qualifications catalog in Customizing for Personnel Development.

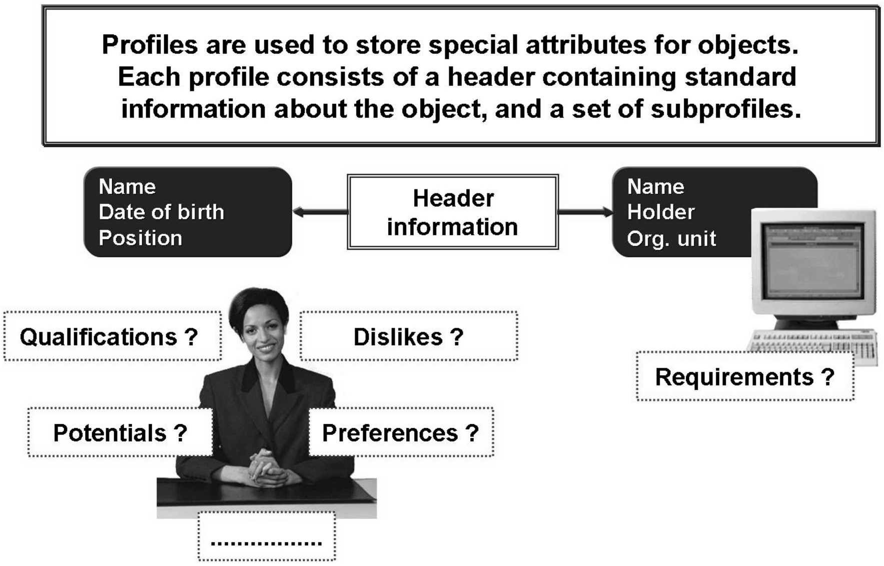

Figure 97: Profiles

Profiles are used to assign attributes to objects.

Each profile comprises a header, and a number of subprofiles. The header contains standard information on the object in question. In the case of a person, this information might include the person's name, date of birth and the position the person holds. The subprofiles contain more specific information on a particular aspect. For example, a person's *qualifications* subprofile contains details of the person's skills and knowledge.

In Personnel Development, you can display and edit profiles in the Object Manager.

There are many ways in which you can evaluate and analyze the information contained in subprofiles.

Figure 98: Profile Matchups

Profile matchups allow you to compare qualifications and requirements of persons, positions, and jobs with each other. You can include as many objects as you please in a profile matchup.

When you compare a qualification with a requirement, one of the following scenarios can result:

- The qualification fulfills the requirement exactly.
- The qualification does not fulfill the requirement (that is, the proficiency of the qualification is lower than is required, or does not exist at all).
- Overqualification (that is, the proficiency of the qualification is higher than is required).

You can display profile matchups in list form graphically.

If Personnel Development is integrated with Training and Event Management, you can use the *Generate training proposals* function. In this case, the system will propose training courses (business events) that can provide any qualifications that are missing. You can make direct bookings for these business events or courses.

If you select the *Qualification deficits only* option, this means that the results of the profile matchup will be restricted to entries where qualifications are lacking (that is, the proficiency of the qualification is lower than is required, or the qualification does not exist at all).

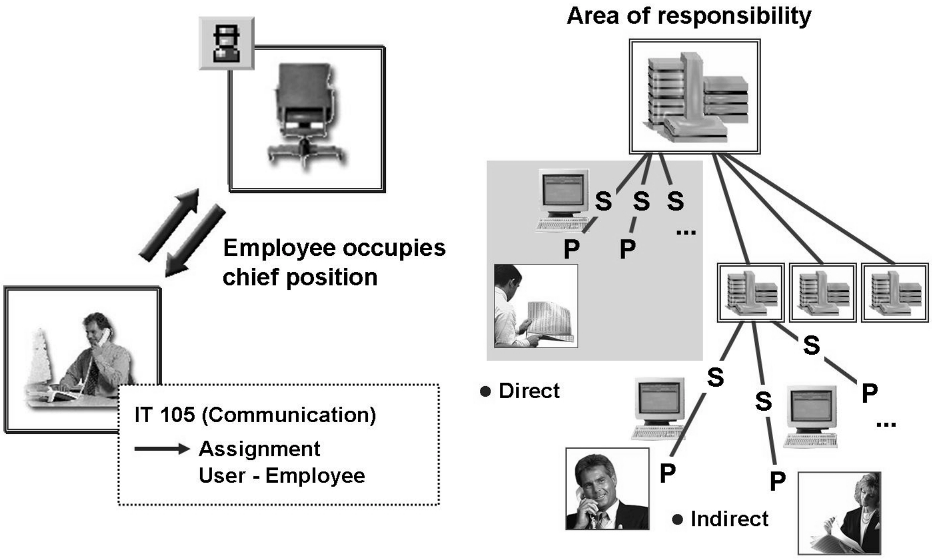

Figure 99: Digression: Manager's Desktop: Prerequisites

If you want to use the functions provided by the Manager's Desktop, you must first use the Organizational Management application component to create an organizational plan for your enterprise. The manager must also occupy the chief position in an organizational unit.

When the user (the manager) logs on, the system determines all of the organizational units for which he or she is responsible. The user then sees a tree structure containing the selected organizational units with their positions and assigned holders, which can be edited using a function list, for example. The area of responsibility displayed for the manager is merely an excerpt from the organizational plan created for the enterprise - unless, of course, the manager is responsible for the entire enterprise.

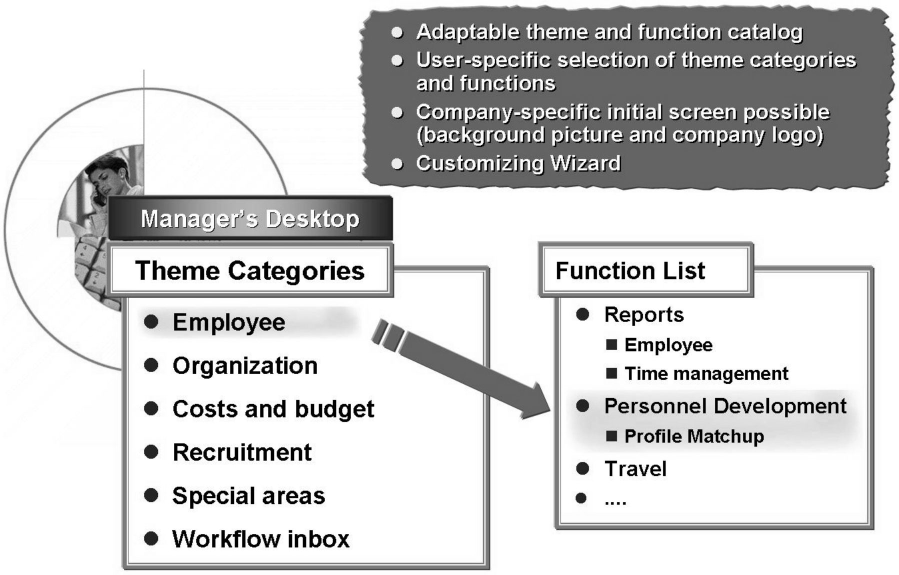

Figure 100: Digression: Manager's Desktop: Initial Screen

The initial screen provides an overview of the default overall scenario in the Manager's Desktop, which consists of the five theme categories listed above and their function lists.

The function codes in Customizing can be used to put these categories into customer-specific hierarchies. The categories can also be enhanced with customer-specific functions.

Furthermore, the user can deactivate unnecessary categories and functions on the initial screen and on the various screens of the different application components. It is always possible to switch between user settings and standard settings.

The initial screen can be adapted to customer-specific requirements in Customizing. For example, it can be enhanced with an enterprise logo and/or background picture.

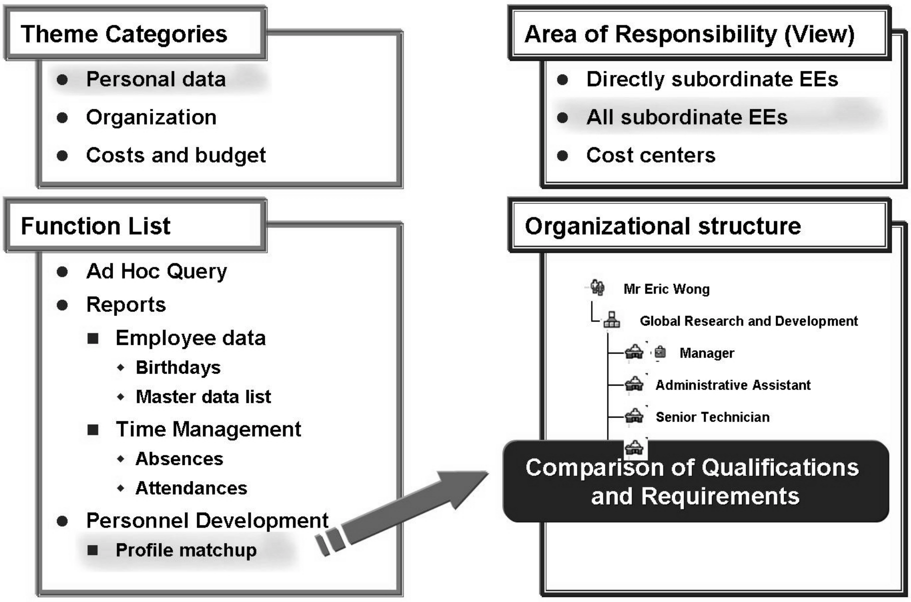

Figure 101: Digression: Manager's Desktop: Theme Categories and Areas of Responsibility

User-friendly selection options make it easy for managers to access the information they require.

Facilitated Discussion

Discussion Questions

Use the following questions to engage the participants in the discussion. Feel free to use your own additional questions.

Lesson Summary

You should now be able to:

- Explain the profile matchup

Lesson: Course Registration

126

Lesson Duration: 90 Minutes

Lesson Overview

In this lesson, you learn about Training and Event Management.

Lesson Objectives

After completing this lesson, you will be able to:

- Book an employee for a business event

For more information, see the Instructor Guide in SAPNet.

Business Example

Employees who have qualification deficits are enrolled for training.

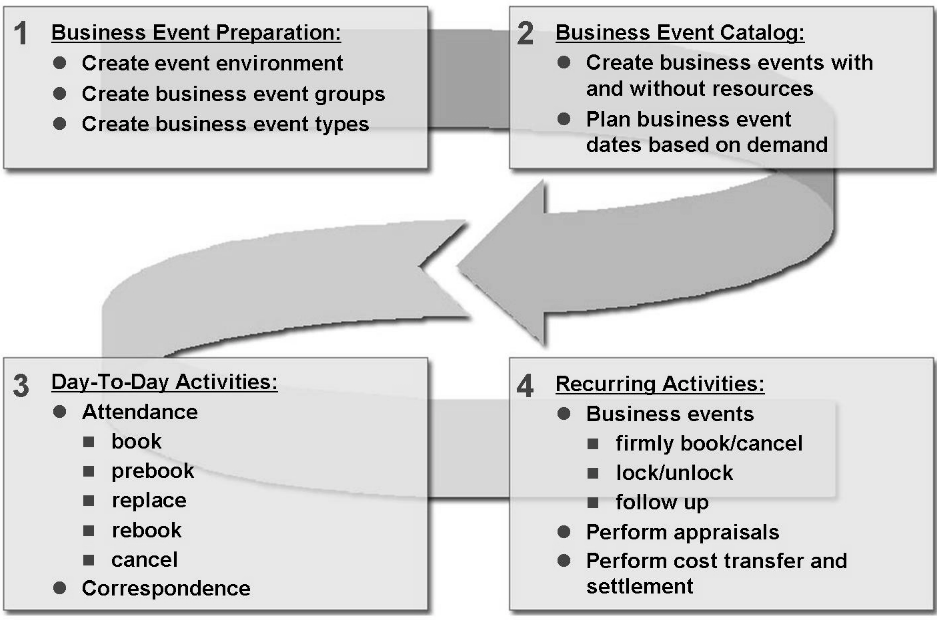

Figure 102: Processes in Training and Event Management

Training and Event Management comprises four main processes:

- The *business event preparation* phase comprises the creation and maintenance of all of the master data you access when you create your business event catalog: time schedules, event locations, resources and so on. You also create the business event groups and event types that form the basic framework of your event catalog.
- You then create your *business event catalog*. You can create individual event dates with or without resources, and you can plan multiple event dates at one go based on the existing demand.
- Once you have created your business event catalog, you can carry out *day-to-day activities* for the events. You can make bookings for both internal and external attendees, prebook attendance, replace bookings, rebook and cancel attendance. The Correspondence function provides suitable notifications that you can output for each of these activities.
- The *recurring activities* phase comprises associated activities that are required periodically. These are firmly booking events, locking and unlocking events, canceling and following up events.

Each of the processes is supplemented by appropriate reporting options.

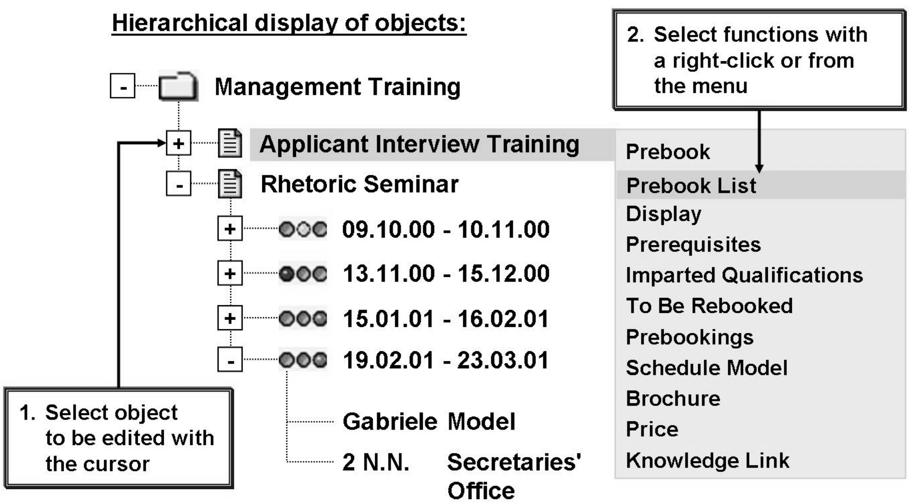

Figure 103: Working in the Dynamic Menus

Training and Event Management has seven dynamic menus that considerably facilitate and simplify operation of the system: the master data menu, the attendance menu, the business event menu, the information menu, the planning menu, the resource menu, and the tool menu.

The dynamic menus offer an alternative way of creating and maintaining the objects used in *Training and Event Management*. The advantage of the dynamic menus is that you create data and access functions directly in the clearly structured environment of the business event hierarchy.

When you select an object, the system automatically reads the current object data so that you do not have to enter it yourself. For example, if you place the cursor on a business event type and choose *create business event*, the system reads the relevant data for the event date you want to create.

You access the various functions either via the menu or by clicking the right mouse button beside the object concerned.

You can set filters and selection criteria to control precisely what data is displayed in the dynamic menus: for example, you can set the status criterion to display only events in planned status.

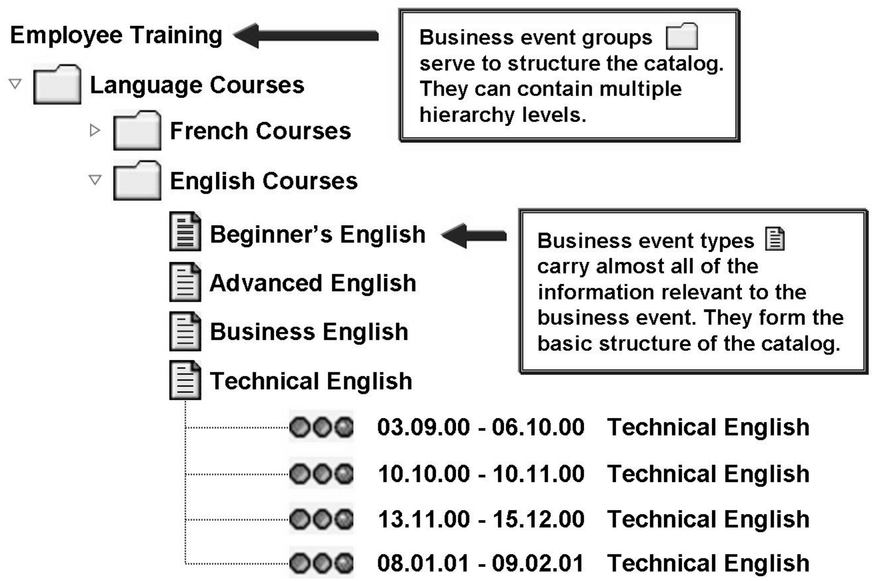

Figure 104: Business Event Preparation: Business Event Hierarchy

The business event catalog is presented in a hierarchical form. It is made up of business event groups, event types, and the actual events.

A **business event group** is a grouping together of business event types that share the same characteristics or deal with related subject matter. You can also combine several business event groups into a single business event group (in other words, business event groups can be structured hierarchically themselves).

A **business event type** is a generalized description of a business event. You do not define specific dates for a business event type. Business event types are assigned to event groups. Event groups and types form the basic framework of the business event catalog.

A **business event** is a specific occurrence of a business event type, scheduled to take place on a specific date. A **business event** (also referred to as a business event date) inherits all of the attributes stored for the event type, and is scheduled to take place on a specific date.

You can create business events with or without resources (e.g. such as equipment, rooms and so on).

You book attendees for business events.

Hint: You create business event (dates) in the **dynamic business event menu**.

Figure 105: Day-to-Day Activities

In the dynamic attendance menu, you can execute all of the functions relating to booking activities: you can execute all of the functions for attendance bookings contained in **day-to-day activities**.

Training and Event Management lets you offer self-service access to the most important day-to-day functions of the application. These services are provided to the user in the form of *Employee Self-Services* in the corporate intranet or as *Internet Services* on the Internet.

Correspondence is automatically output to accompany each of the booking activities if you make the relevant settings in Customizing. You can monitor the output of correspondence using the *Correspondence History* function.

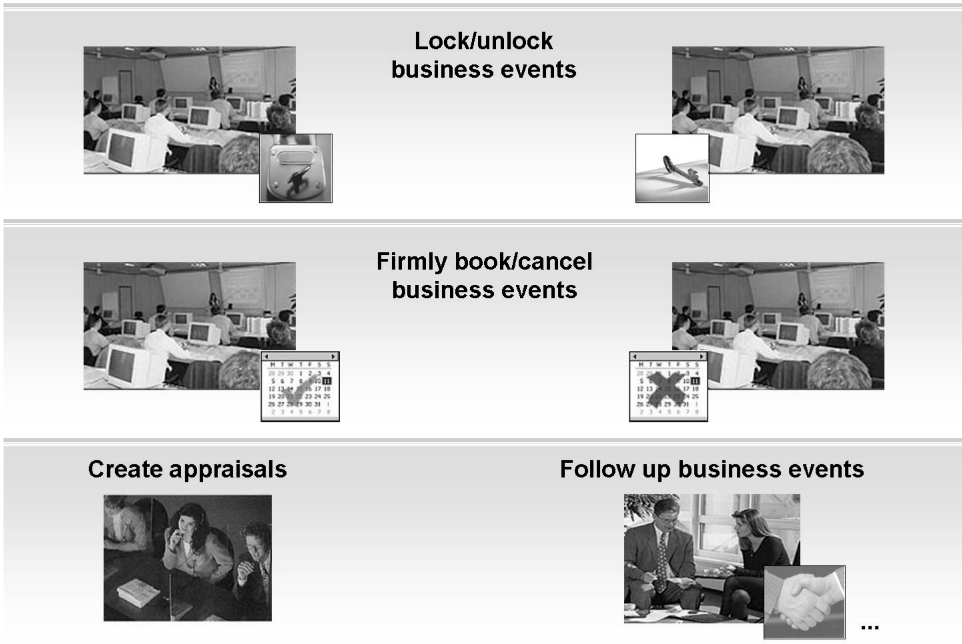

Figure 106: Recurring Activities

You have created event dates in the business event menu. You have booked attendees for these event dates in the day-to-day activities.

You can execute the following functions in the business event menu:

- If you want to temporarily prevent further processing of events, you can lock them and unlock them later in the business event menu.
- If you created them in planned status, you can now change the status to firmly booked. If there is not a sufficient number of bookings for the events, you can cancel the events.
- When a business event has been held, you can perform follow-up processing for it (transfer qualifications) and have it appraised.

131 Exercise 5: Course Registration

Exercise Duration: 10 Minutes

Exercise Objectives

After completing this exercise, you will be able to:

- Book an employee for a course
- Display an employee's training history

Business Example

Your employees are booked for courses in Training and Event Management so that they can acquire skills and qualifications that they lack.

Task 1:

1. In the dynamic attendance menu, book Lars Becker (personnel number 111991##) for a course. To do so, select any event from the business event catalog *Training International* (for example, SAPHR).

   Hint: In the Payment Information dialog, if you are asked for account assignment information, select Free of Charge.

Task 2:

1. In the dynamic information menu, display the training history of Lars Becker (personnel number 111991##) from *01/01/2003*.

Solution 5: Course Registration

Task 1:

1. In the dynamic attendance menu, book Lars Becker (personnel number 111991##) for a course. To do so, select any event from the business event catalog *Training International* (for example, SAPHR).

   Hint: In the Payment Information dialog, if you are asked for account assignment information, select Free of Charge.

   a) In the Easy Access menu, choose *Human Resources → Training and Event Management → Attendance → Attendance Menu*.

   b) You are working in the *Dynamic Attendance Menu*. Expand the business event catalog entry *Training International* so that you can see the dates scheduled for a business event type, for example, for SAPHR.

   c) Right click the event date you require. From the context menu, choose *Book*.

   d) In the *Book Attendance: Data* dialog box, enter Lars Becker's personnel number *111991##* in the *Personnel No.* field.

   e) To confirm the booking, choose *Book Attendance*.

      Hint: In the *Payment Information* dialog, if you are asked for account assignment information, select *Free of Charge* and choose *Save*.

   f) Go back to the *Dynamic Attendance Menu* by choosing *Cancel*.

Continued on next page

Task 2:

1. In the dynamic information menu, display the training history of Lars Becker (personnel number 111991##) from *01/01/2003*.

   a) You are still in the Dynamic Attendance Menu. Choose *Goto* → *Information Menu*.

   b) In the dynamic information menu, choose *Information* → *Attendance* → *Attendee's Training History*.

   c) On the selection screen of the report, under Attendee Data in the *Attendee* field, enter the personnel number *111991##* (Lars Becker). Under *Reporting Period* enter *01/01/03* as the start date. Accept the default end date.

   d) Choose *Execute* to generate the list.

   e) You can now see what courses the attendee attended in the specified period.

   f) Choose *Back* (several times) to return to the Easy Access Menu.

Lesson Summary

You should now be able to:
- Book an employee for a business event

Lesson: Learning Solution

135

Lesson Duration: 30 Minutes

Lesson Overview

In this lesson you will learn about the Learning Solution, a solution SAP offers for Blended Learning.

Lesson Objectives

After completing this lesson, you will be able to:

- Explain the Learning Solution.

This course does not have its own learning solution system. You can however go to the Portals demo site as (see unit 10) and view the learning solution. To do this, log on with the user Jordanm and password Welcome. Make sure that you are looking at the current demo scenario, however, as it often changes.

The information in this lesson is based on version 3.0 of the Learning Solution. This is included in mySAP ERP 2004. The instructor can shorten this lesson if the content is not of much interest to the participants.

For more detailed information, consult HR270.

Business Example

You are looking for a solution that allows your company to implement personalized learning that includes all learning methods. For example, employees are to receive further training in the form of Web-based courses that can be accessed anytime and anywhere.

Fundamentals

- **Personalized learning – adaptable to individual requirements and learning strategies (adaptive and exploratory learning)**
- **Integration with ERP systems**
- **Compliance with internationally-recognized WBT standards**
- **Authoring tools for creating content and structures**
- **Reusability of created content**
- **Flexible, dynamic management of learning offering**
- **Integration of all learning methods (blended learning)**
- **Tracking of learning progress**
- **Placement and final tests**

Figure 107: What Must a Modern Learning Solution Offer?

When a company considers implementing a learning solution of any size, it sets high standards and requirements so that the investment pays off. The following lists some of these requirements:

- Since everyone has a different learning style, instructional designers must personalize training so that it reacts to the needs and requirements of the learner (role in the company, qualification deficits, and expiring certificates). Everyone learns differently. That is why e-learning supports individual learning strategies and provides a more efficient learning experience (adaptive learning). The learner should also be given freedom of choice while learning (for example, navigation at will within e-learning courses – exploratory learning).
- All of the learning processes must be seamlessly linked with the ERP system. SAP provides seamless integration with employee data.
- Nowadays, standards are of great importance in the area of Web-based training. Content, even if it is stored in different Learning Management Systems (LMS), must be readily available. This kind of interoperability (exchange between LMS) is only possible through the use of internationally recognized standards. Such standards are currently being developed on the market. The ADL SCORM standard (Sharable Content Object Reference Model) seems to be the established standard at the present time.

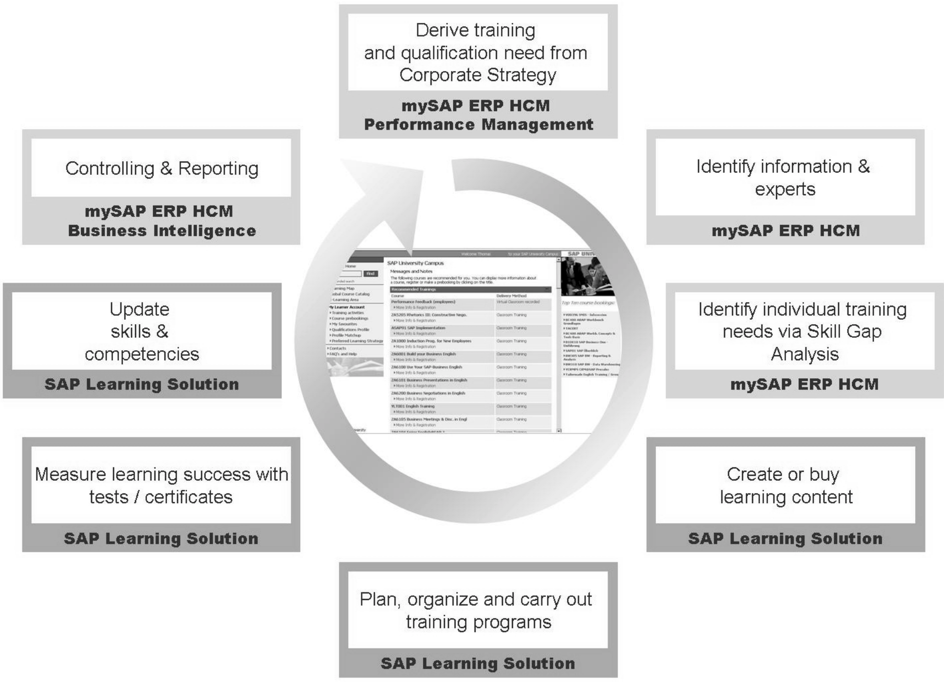

Figure 108: Integrated Learning Processes and Business Processes

Learning is a key component of every enterprise.

The following example explains the learning cycle illustrated in the diagram. Experts are needed for a specific project or task at the company. Management performs staff planning and scheduling with the help of Performance Management. The requirements and tasks are continually changing. Employees must extend and update their knowledge. This is achieved by training (classroom training and e-learning). Organizations use tests and certifications to test learning objectives and knowledge. When the learner passes a test, the system updates his or her skills (qualifications) and automatically transfers the new qualifications to the Skills & Competencies Database. If the database is continually updated, the circle closes. You have quick access to up-to-date data about experts at all times. Performance Management is not a component of the SAP Learning Solution, but of mySAP ERP HCM.

The Learning Solution enables access to components in mySAP ERP Personnel Development, such as Qualifications (Skills).

SAP Learning Solution

A solution for different target groups

- **Learners**
  - Individual learning environment that can be personalized
  - Interactive, adaptive learning experience that is suitable for different learning styles
  - Integration with mySAP HCM - learner data is transferred to the employee master data
- **Authors/Instructional Designers**
  - Tools for creating and structuring instructional content
  - Content management with WebDAV interface for administration and version management
- **Training Administrator**
  - Simple catalog administration
  - Web reporting using different training processes and data
- **Instructors**
  - Web reporting: Overview of instructor activities, learner participation, and appraisal statistics
- **Managers**
  - SAP Workflow
  - HCM integration and Web reporting

The SAP Learning Solution is used by various target groups:

- **Learners**, who can trigger and carry out all learning activities in their learning portal. All learning steps are matched and updated with the data in the back-end system.
- **Authors/instructional designers,** who create learning objects and structure them into courses (learning nets). The SAP Learning Solution provides the necessary tools. Creating and structuring e-learning content is different from creating classroom training material. E-learning requires learning objects that are relatively small, self-contained units. Animations, videos and audio effects are used frequently. Although text can also be used on its own, it is often too uninspiring to sustain the learner's interest. Learning content must be well structured in an e-learning environment and deploy a variety of pedagogical approaches to have the most effect.
- **Training administrators** manage the training catalog in the back-end system, distribute training courses to various target groups, and access reports to evaluate training processes and data.
- **Instructors** can use reports to obtain information on the courses they have to teach. They can view participant lists, appraisals, and so on.
- **Managers** can monitor their employees' training process via an SAP Workflow. The SAP Learning Solution provides a standard workflow that can be activated on booking training courses of any type. In addition, it provides managers with a number of reports on their employees' learning activities and progress.

Instructors should be familiar with the following abbreviations and technical names of the components of the SAP Learning Solution 3.00:

- LSO 300 for back end functionality (training management)
- LSO FE 300 for the front end (Learning Portal)
- LSO CP 300 for the Content Player
- LSO AE 300 for the authoring environment

Learning Solution 3.00 runs on SAP Netweaver 04 (EP 6.0 SP4 is an integrated component of SAP Netweaver 04).

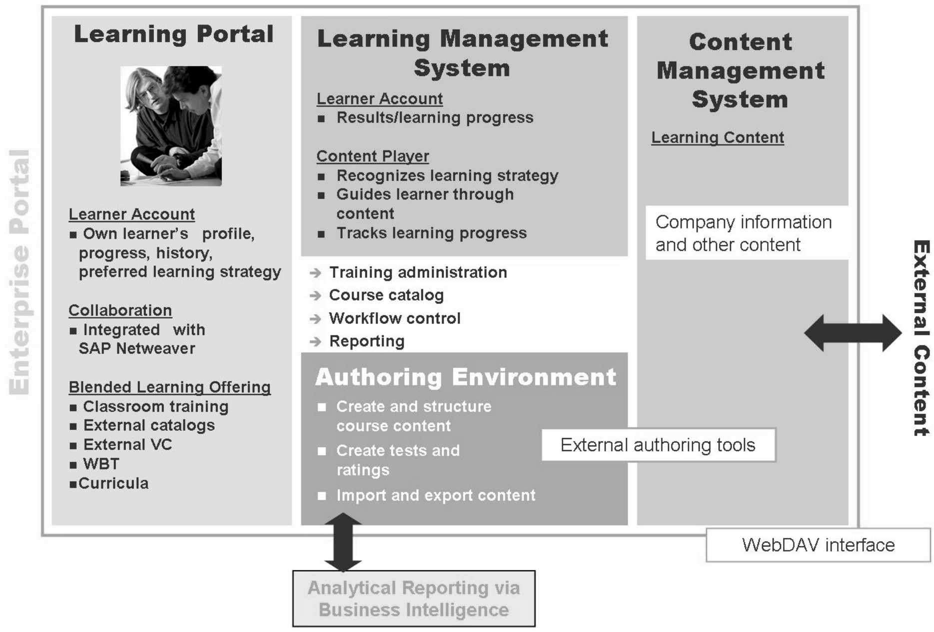

Figure 109: Learning Solution: Overview

The SAP Learning Solution is a comprehensive solution for blended learning (WBT, instructor-led training, curricula, and so on).

It comprises:

- A **Learning Portal**, the Web-based learner's personalized learning environment:
  - Courses suggested to the learner by Personnel Development
  - Mandatory courses for organizational units forwarded to the learner
  - Mobile Learning (download WBT, learn offline, synchronize learning progress when online)
  - Integration with Performance Management (evaluation of courses, trainers)
  - BADI for messages to learners, such as customer-defined personal course proposals
  - Requirements from Food and Drug Administration (FDA) and others:

    Electronic attendance confirmation (with signature)

    Electronic data records
  - Integration of external training providers (hosted content)
  - Integration of Collaboration for SAP Enterprise Portal (6.0)
- A **Learning Management System** to control the learning process and manage the course offering
  - Curriculum functionality (education elements in sequence)
  - Workflow (templates for course approval in booking and cancellation scenario)
  - Integration into mySAP BW to perform analytical reporting
- An **Authoring Environment** to create and structure learning content and tests
- A **Content Management System** (Enterprise Portal) to store and manage learning content

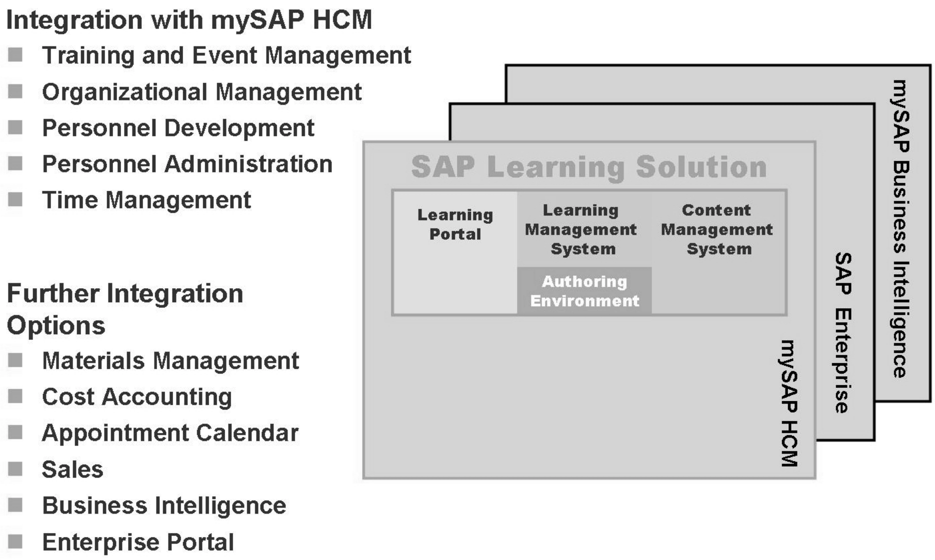

Figure 110: Integration with mySAP HR

Integration with mySAP HR

- Integration between the SAP Learning Solution and mySAP HCM optimizes education and training processes by using existing Personnel Management data and processes.
- For example, if you already use Training and Event Management, Personnel Development and Organizational Management, training proposals that were made for employees on the basis of qualifications, requirements, and position data can be generated in the SAP Learning Solution. The SAP Learning Solution offers the possibility of displaying these personal training proposals for the employee in the Learning Portal. Courses can be linked to jobs, positions, and organizational units in Organizational Management.

Organizational Management

- Integration with *Organizational Management* enables access to the complete organizational structure. You can book entire organizational units as participants, and not just individual employees. You can define target groups for courses by prescribing courses as mandatory for positions and jobs.

Personnel Development

- Integration with Personnel Development means that training proposals made during career and succession planning can be converted directly into bookings or prebookings for courses. If the profile-matchup reveals a qualification deficit, training proposals can be generated automatically. On successful completion of the course, the employee's profile is updated with the new qualification. Qualifications can also be defined as prerequisites for course participation.

Personnel Administration

- The employee's master data that is required when making a course booking (name, address, and so on) is stored in Personnel Administration.

  Integration with Training Management enables managers to prescribe specific mandatory courses for individual employees.

Time Management

- Integration between the SAP Learning Solution and Time Management enables comparisons between employees' training dates and their time-off data (vacation, illness, business trips, and so on). This helps to ensure that an employee is free to participate in courses. It also prevents time conflicts such as an employee being scheduled as a participant and an instructor at the same time.

Other integration options:

Sales

- In addition to managing data about employees, data for external participants can also be managed. Customer data from Sales and Distribution is used for this purpose. This data is used for billing purposes and to determine participants' addresses. If you want to use this option, you must implement the relevant sub-component of the ***mySAP Customer Relationship Management*** solution.

Cost Accounting

- While external participants are billed for course participation, training costs for internal employees are settled by means of internal activity allocation. During this process the employee's cost center is debited with the costs. Participation fees may also be posted to internal orders. If you want to use this option, you must implement the relevant sub-component of the *mySAP Financials* solution.

Materials Management

- Classroom training requires course materials such as participant handbooks, office materials and so on. These materials can be procured or ordered directly from Materials Management, providing this component has been integrated. If you want to use this option, you must implement the relevant sub-component of the *mySAP Supply Chain Management* solution.

SAP Appointment Calendar

- An employee's bookings can be entered automatically in the SAP Appointment Calendar. Course dates are entered and displayed as appointments. The SAP Appointment Calendar can be synchronized with other calendars, such as Outlook. In this case, course dates are also entered in the employee's Outlook calendar.

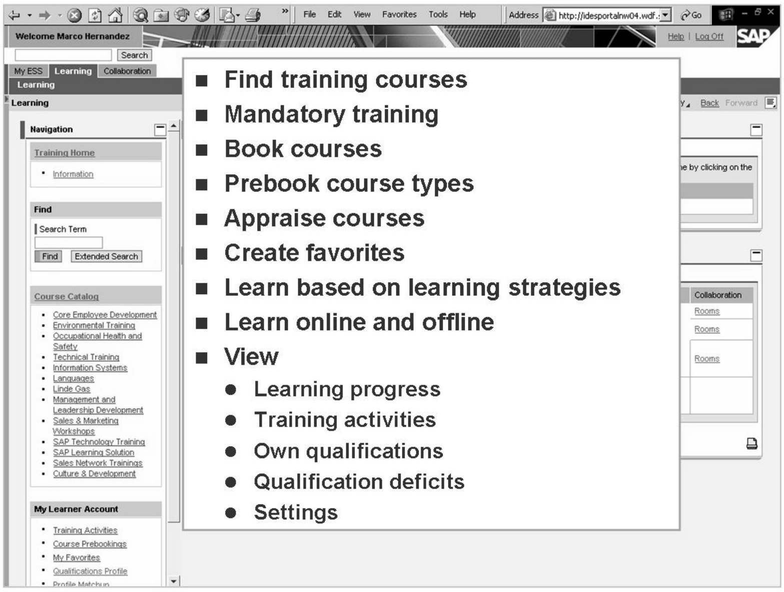

Figure 111: Functions in the Learning Portal

The Learning Portal is a preconfigured iView.

The Learning Portal offers:

- Course catalog display
- Course selection and registration
- Overview of training history and learning progress
- Automatic transfer of qualifications to personal data

The Learning Portal is available as a Business Package for the SAP Enterprise Portal (EP).

Facilitated Discussion

Discussion Questions

Use the following questions to engage the participants in the discussion. Feel free to use your own additional questions.

Which integration options exist between the SAP system and the SAP Learning Solution and which of these are useful for your company?

Lesson Summary

You should now be able to:

- Explain the Learning Solution.

Lesson: Performance Management

144

Lesson Duration: 30 Minutes

Lesson Overview

In this lesson, you will learn the basics of the Appraisal System.

Lesson Objectives

After completing this lesson, you will be able to:

- Understand the appraisal process including objective settings

For more information, see the Instructor Guide in SAPNet.

Business Example

Your company wants to implement Performance Management as a performance appraisal tool.

Figure 112: Appraisal Systems: General

As a personal development instrument, Performance Management enables you to rate employees in a formalized, standardized way on the basis of predefined criteria.

The creation of Appraisal Systems provides you with support when planning, holding, and evaluating appraisals. An appraisal system is a self-contained process that enables you to perform formalized and standardized employee evaluations in a business context using one or more templates (appraisal templates). The process ensures the highest degree of objectivity.

As well as in *Personal Development*, Performance Management is also used in the Learning Solution.

You can map the following appraisal systems, for example:

- **360° feedback appraisals:** Appraisals that draw on diverse sources (supervisor, peers, and self-appraisals)
- **Performance appraisals:** Appraisal of an individual employee
- **Surveys and questionnaires:** Employee opinion polls, for example

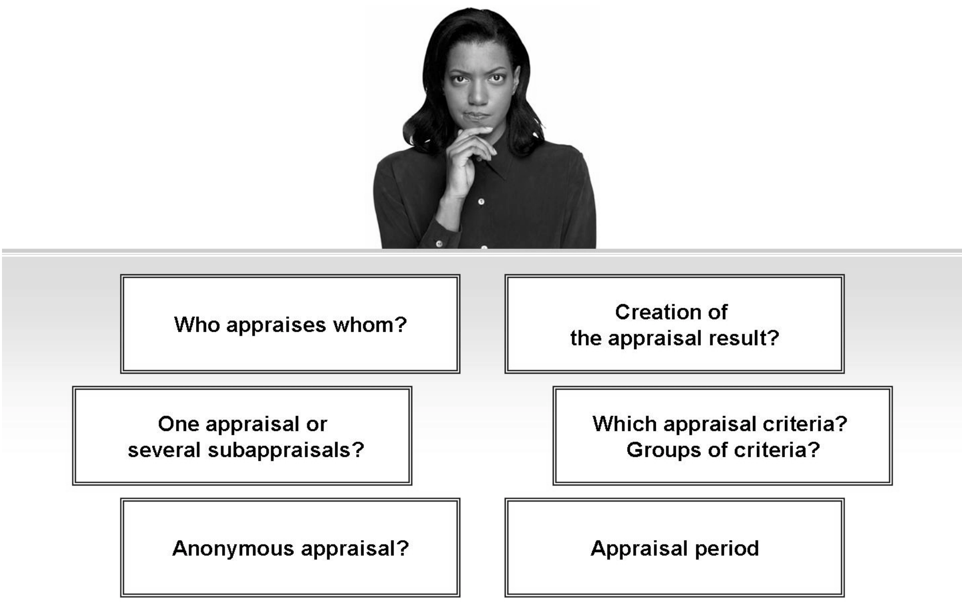

Figure 113: Information Required for Appraisals

You must provide the following information for appraisals:

- Appraiser and appraisee (who appraises whom? For example, a supervisor appraises an employee).
- The number of appraisers carrying out the appraisal.
- The identity of the appraisers. Should the appraisers remain anonymous?
- The period to be appraised (for example, the previous year for performance appraisals).
- The criteria (for example, quality of work, ability to cope with stress, and so on) the appraiser should use in the appraisal. Should these criteria be combined together into groups? The scales that appraisers should use to rate these criteria (in other words, what kind of proficiencies should there be for appraising the individual criteria?). Whether certain criteria or groups of criteria should be weighted more than others.
- How the appraisal results are to be determined. Whether individual criteria (groups) affect the result more than others. If several subappraisals were held, how the overall appraisal should be determined from these subappraisals.

Appraisal Process

The appraisal process is divided into various stages. *Status management* is used to map these stages.

1. *Preparation*

   The first step in the process involves preparing the appraisal. At this point, you define planning data such as the period to be appraised, and the objects involved in the appraisal. You can copy planning data from an appraisal that you have already completed. You can also prepare appraisals centrally. You can generate a to-do list containing objects for which you must prepare appraisals.

2. *Hold Appraisal*

   This stage is where you actually rate the appraisal elements. The data displayed for an appraisal element includes the weighting, the rating received, and the weighted result of the rating. You can save an appraisal temporarily and continue editing it later.

3. *Completion*

   This involves saving the appraisal with an historical record so that it can no longer be changed. If you want to allow changes to historically recorded appraisals, you must maintain the relevant control parameters in Customizing.

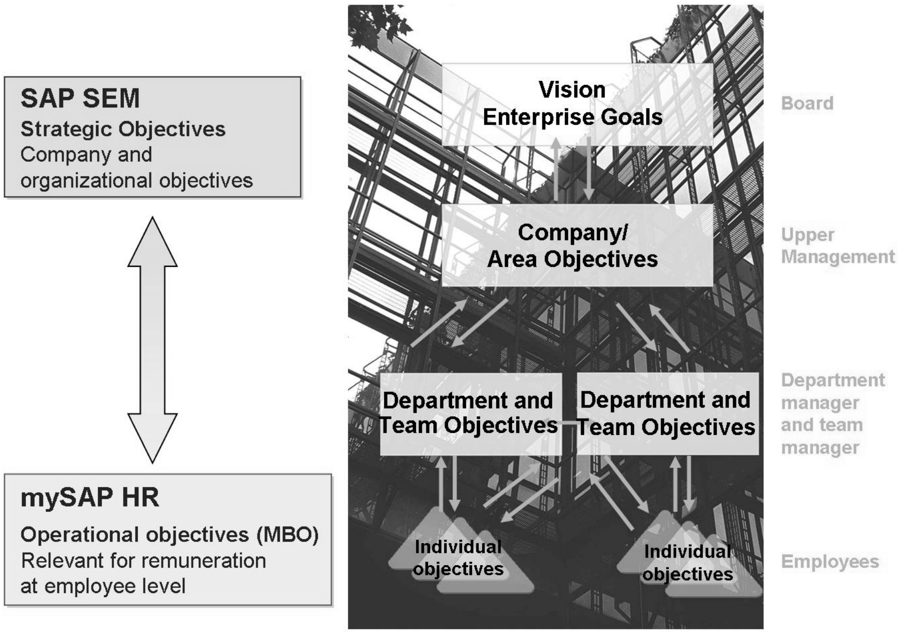

Figure 114: Management by Objectives

This slide explains the objective setting process in the context of the performance feedback process.

Ideally, the objectives should be agreed upon in the planning sessions that take place at every organizational level.

This process takes place both from the top-down and from the bottom-up. On the one hand, the company goals are decided at board level and passed down to the whole organization; on the other hand, these goals are linked during planning sessions that should take place at every organizational level.

Communication between managers and employees is important to ensure that the objectives set by the manager are realistic and appropriate.

When setting individual objectives for the year ahead, the manager and employee should set both long and short-term objectives.

Several short-term goals should be set, as well as a number of long-term ones. Some objectives may fall into both categories.

It is of vital importance that the development plan agreed upon focuses on the employee's long- and short-term development.

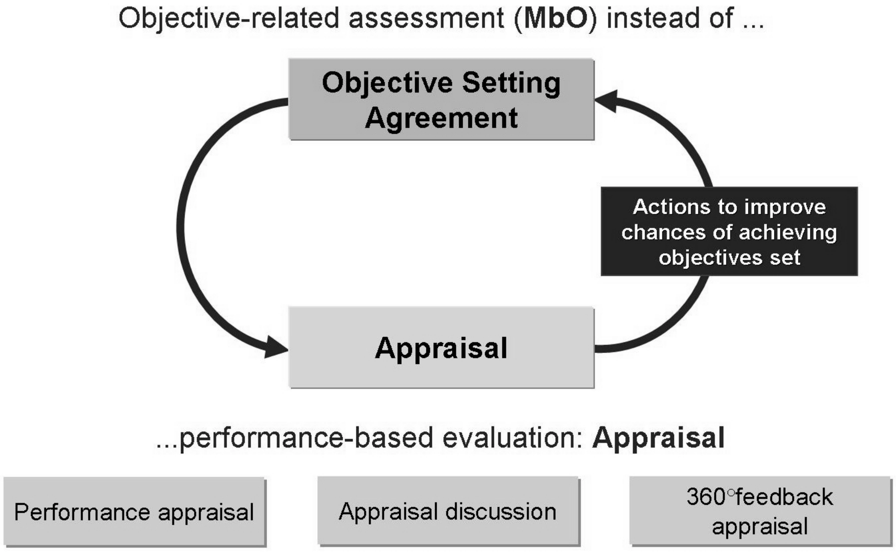

Figure 115: Objective Setting: Changes in Performance Appraisal

Performance Management is a modern method of Personnel Management. Compensation is dependent upon the extent to which the employee's performance matches the agreed objectives. This method of management by objectives frequently leads to increased motivation and enhanced performance on the part of employees.

- The appraisal process involves the following:
  - The manager and employee agree upon objectives, conduct an employee review, and close the performance appraisal.
  - Strategic goals from the Balanced Scorecard in SEM are supported and appraisal data is transferred to mySAP HR
- Company, department, area, and individual goals are all taken into account.
- The Performance Management process can be supplemented with performance feedback interviews.
- Different appraisal templates are available to support different appraisal types, such as subappraisals or 360° feedback appraisals.
- The results of this process can impact compensation by leading to compensation adjustments.

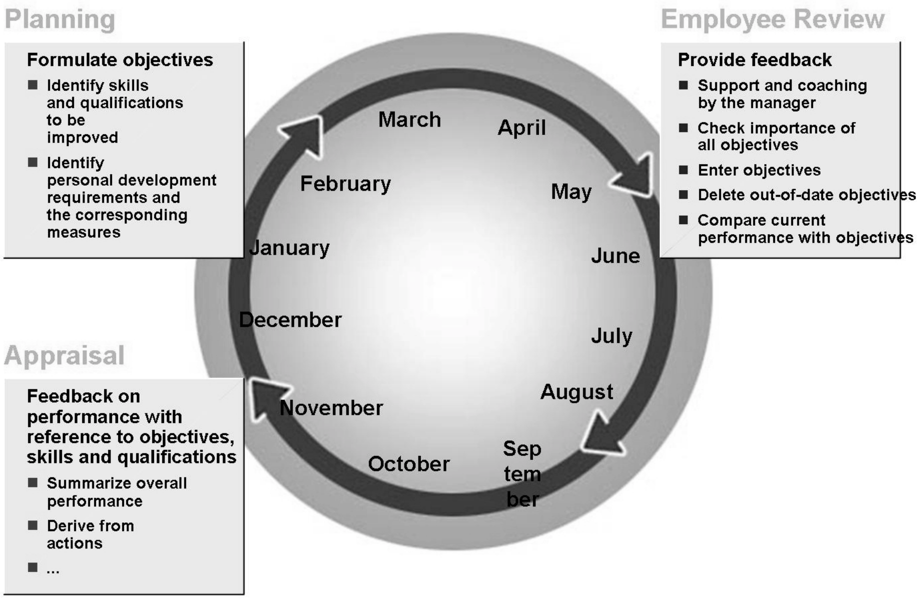

Figure 116: The Continuous Feedback Process

Performance Management supports all the different phases in the continuous performance feedback process.

Similar to appraisals, objectives are set once a year. Once a year the manager holds an interview to set objectives with each of the employees. The manager and the employee together agree upon specific objectives and results to be achieved by a specific date. These objectives can be quantitative (measurable) or qualitative. As a rule, the objectives are recorded in writing and stored in the employee's personnel file.

The employee's performance is measured according to the objectives set and can be used as the basis for determining compensation elements (such as a bonus). In this way, every employee is clear about what is expected of them and how they can improve their compensation. To keep objectives at the forefront, reviews are carried out during the year. During these reviews, the objectives (planned) are compared with the results (actual). The planned/actual difference is recorded and where necessary, the objectives are modified (adjustment or reformulation of the objective setting agreement).

At the end of the cycle, the objectives that were set are evaluated, and corresponding bonus payments or salary adjustments are made. At the same time, the objectives for the following period are set. The circle closes at this point.

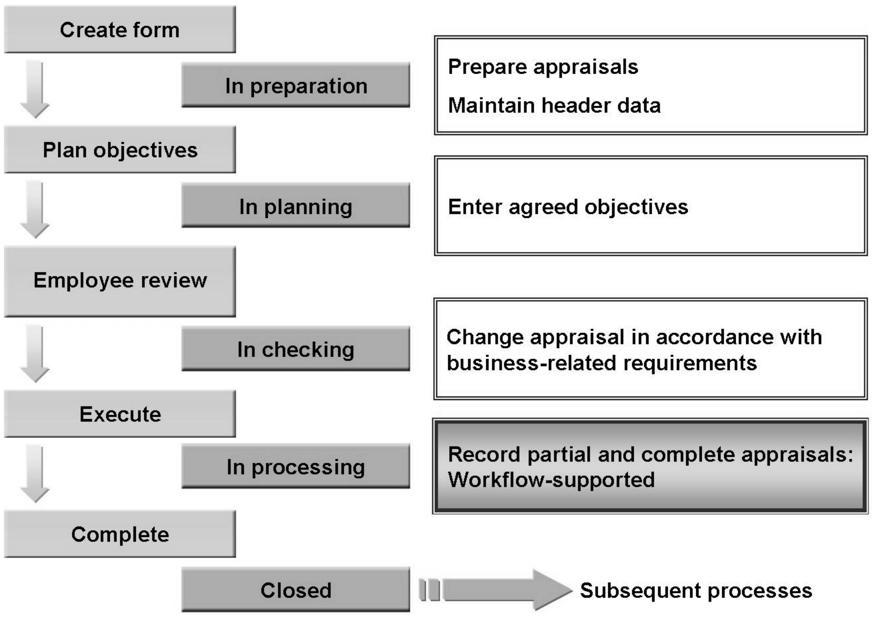

Figure 117: Status Handling

Other statuses:

- Approved
- Rejected
- Closed approved
- Closed rejected

Further processing can be triggered via Workflow and be subject to an approval process, such as employees approving their own appraisal. In this case, the approval would trigger an update of the qualifications data and an adjustment of the remuneration components.

151 Exercise 6: Performance Management

Exercise Duration: 10 Minutes

Exercise Objectives

After completing this exercise, you will be able to:

- Display the appraisals an employee has received

Business Example

Your employees are regularly appraised. The appraisal results are stored and evaluated in Personnel Development.

Task:

1. In the Information System for Personnel Development, display the appraisals that have already been maintained in the system using the SAPHR appraisal template.

   Display the details of an appraisal template of your choice.

Solution 6: Performance Management

Task:

1. In the Information System for Personnel Development, display the appraisals that have already been maintained in the system using the SAPHR appraisal template.

   Display the details of an appraisal template of your choice.

   a) In the Easy Access Menu choose: *Human Resources → Personnel Management → Personnel Development → Information System → Reports → Appraisals*

   b) You are in the *Evaluate Appraisal Documents* screen.

   c) In the *Appraisal Template* field, use the input help to select the entry *SAPHR*.

   d) Under *Selection Options*, select all of the proposed statuses (in preparation, and so on)

   e) Choose *Execute*.

   f) A list of all employees is displayed whose objective setting agreements were created using the selected appraisal template.

   g) Select a line and choose *Display*.

   h) Choose *Back* to return to the Easy Access Menu.

Lesson Summary

You should now be able to:

- Understand the appraisal process including objective settings

Unit Summary

You should now be able to:

- Explain the profile matchup
- Book an employee for a business event
- Explain the Learning Solution.
- Understand the appraisal process including objective settings

Test Your Knowledge

155

1. Qualifications

   Choose the correct answer(s).

   - □ A Are stored as requirements for an organizational unit.
   - □ B Are assigned to a person as actual qualifications.
   - □ C Are used as the basis for a profile matchup.
   - □ D Can be acquired through business events and development measures.

2. When a business event has been held, you can perform follow-up processing for it, transfer qualifications and have it appraised.

   Determine whether this statement is true or false.

   - □ True
   - □ False

3. Blended Learning refers to all-round learning. To achieve this, SAP offers the SAP Tutor and the SAP Learning Solution, for example.

   Determine whether this statement is true or false.

   - □ True
   - □ False

4. What is Performance Management?

   ____

   ____

   ____

   ____

156

Answers

1. Qualifications

   Answer: B, C, D

   Qualifications are a list of skills, abilities, and experience that make an employee suitable for a job, position, task, or work center.

2. When a business event has been held, you can perform follow-up processing for it, transfer qualifications and have it appraised.

   Answer: True

   If Training and Event Management is integrated with Personnel Development, you can award qualifications attained at events directly to the employees.

3. Blended Learning refers to all-round learning. To achieve this, SAP offers the SAP Tutor and the SAP Learning Solution, for example.

   Answer: True

   As modern learning solutions, they offer such things as personalized learning. The SAP Learning Solution is integrated with ERP backend systems.

4. What is Performance Management?

   Answer: It is Management by Objectives with a continuous performance feedback process. The agreements contain a number of measurable objectives.

Unit 4

157

Remuneration Adjustments

For more information, see the Instructor Guide in SAPNet.

Unit Overview

- Enterprise Compensation Management
- Payroll
- Personnel Cost Planning

Unit Objectives

After completing this unit, you will be able to:

- Describe the process of compensation adjustment
- Describe the payroll process
- Describe the personnel cost planning process

Unit Contents

Lesson: Enterprise Compensation Management

158

Lesson Duration: 30 Minutes

Lesson Overview

In this lesson, you learn about the different Enterprise Compensation Management options.

Lesson Objectives

After completing this lesson, you will be able to:

- Describe the process of compensation adjustment

For more information, see the Instructor Guide in SAPNet.

Business Example

The employees' compensation is adjusted according to performance.

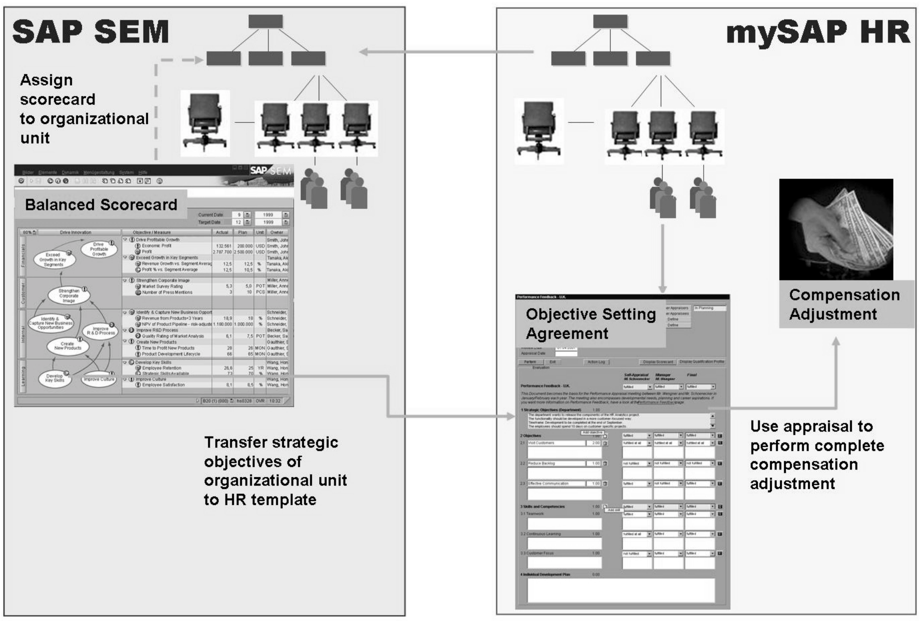

Figure 118: Performance-Related Compensation: Data Flow

Performance Management includes strategic departmental goals in the process of setting individual objectives and making individual appraisals. These are integrated in the individual apprasial forms for each employee.

If an employee receives a very good appraisal, after the appraisal process is concluded, further processing can be triggered in Enterprise Compensation Management. Compensation management grants an employee a bonus, for example.

With SEM (Strategic Enterprise Management), SAP offers a complete solution for strategic enterprise management that includes the Balanced Scorecard, Risk Management, and Management Cockpit.

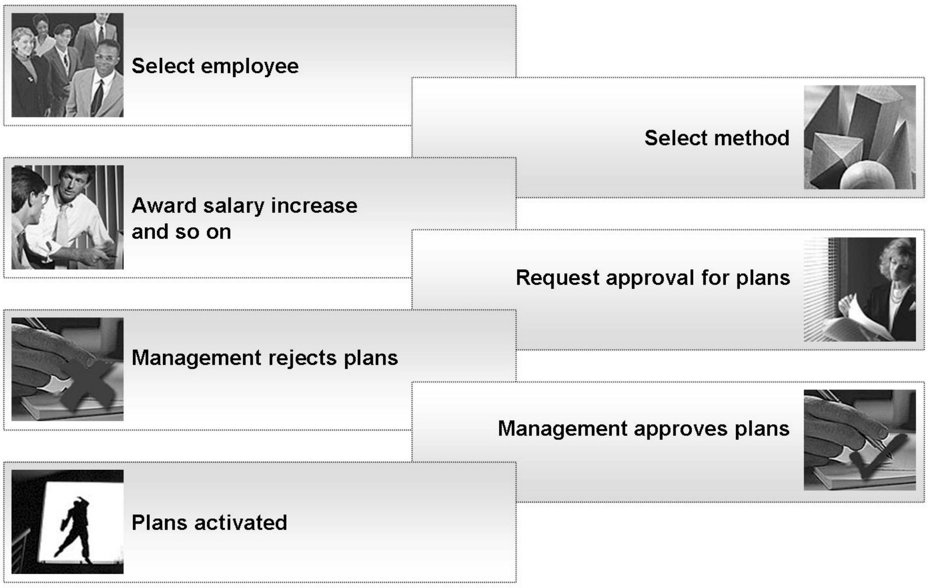

Figure 119: Administration of Compensation

The Enterprise Compensation Management component controls and administers your organization's compensation policies.

Enterprise Compensation Management comprises several areas:

- You can perform **job pricing** in Enterprise Compensation Management. You can save the results of external job evaluation systems and salary surveys. You can use these results to generate salary structures that you can then assign to the jobs and positions in your organization.
- **Budgeting** is used to plan and control how much is spent on compensation adjustments. Budgets are assigned to organizational units.
- **Compensation administration** is used to distribute salary increases, shares, and so on, to individual employees in accordance with remuneration policy at the enterprise. This compensation adjustment is displayed on this slide.
- You can manage **long-term incentives** (awards).

- Overview of all elements of compensation and other payments (for example, benefits) an employee receives
- User-defined template with standard categories, for example:
  - Payment (payroll data)
    - Salary
    - Bonus
  - Other compensation
    - Awards
  - Personnel development actions
    - Seminars
- Print standard letters
- ESS application

Figure 120: Total Compensation Statement

A personnel administrator can generate and print total compensation overviews and send them to employees.

The total compensation overview includes three functions that can be used by the appropriate user groups at your enterprise:

- Display total compensation overview
- Print total compensation statement (mass printing possible)

  Test runs are possible.
- Display personal total compensation overview over the intranet.

161 Exercise 7: Enterprise Compensation Management (Optional)

Exercise Duration: 10 Minutes

Exercise Objectives

After completing this exercise, you will be able to:

- Display the total compensation overview for an employee.

Business Example

Your employees receive bonus payments using compensation adjustments. You can use the total compensation overview to list all the remuneration elements of an employee.

Task:

1. In the information system of Enterprise Compensation Management, display the total compensation statement for the employee Sharon Armstrong (personnel number 54099300).

   Choose 01/01/2002 as the start date for the selection period and one year (or a period determined by the instructor) as the preview period.

Solution 7: Enterprise Compensation Management (Optional)

Task:

1. In the information system of Enterprise Compensation Management, display the total compensation statement for the employee Sharon Armstrong (personnel number 54099300).

   Choose 01/01/2002 as the start date for the selection period and one year (or a period determined by the instructor) as the preview period.

   a) From the Easy Access menu, choose: *Human Resources → Personnel Management → Compensation Management → Information System → Reports → Employee Compensation Data → Total Compensation Statement*

   b) In the *Date and Preview Period* field, enter *01.01.2002* as the start date and *1 year* as the preview period.

   c) Choose *Execute* to confirm this data.

   d) In the Object Manager, choose the search term for the object Person and enter the personnel number *54099300* (Sharon Armstrong) in the *Name* field. The selection result is displayed in the lower section of the screen to the left.

   e) Double click on the personnel number to call the total statement for Sharon Armstrong.

   f) Choose *Back* to return to the Easy Access Menu.

Lesson Summary

You should now be able to:

- Describe the process of compensation adjustment

Lesson: Payroll

164

Lesson Duration: 60 Minutes

Lesson Overview

In this lesson, you learn about the payroll process and selected follow-up activities.

Lesson Objectives

After completing this lesson, you will be able to:

- Describe the payroll process

For more information, see the Instructor Guide in SAPNet.

Business Example

Run payroll for an employee.

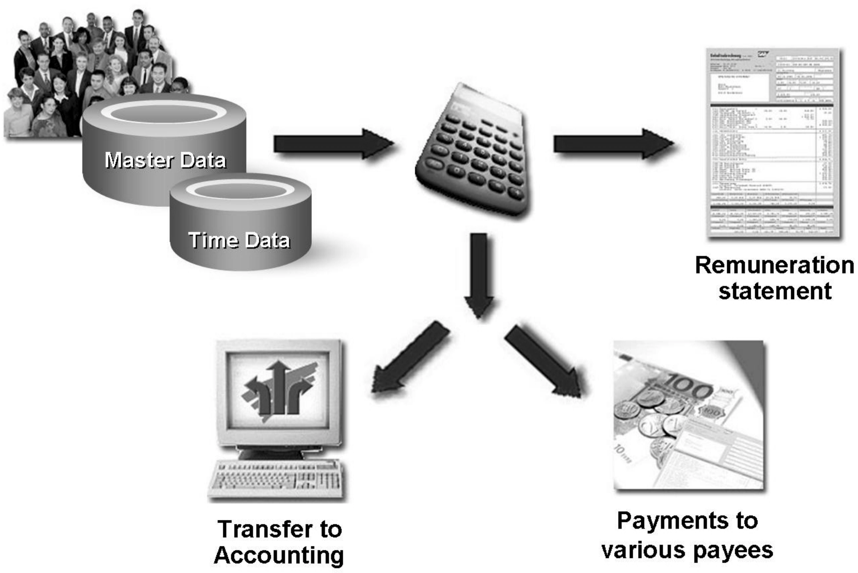

Figure 121: Payroll (1)

Broadly speaking, payroll is the calculation of payment for work performed by each employee. More specifically, however, payroll comprises a number of work processes, including the generation of payroll results and remuneration statements, bank transfers and check payments.

This includes a number of additional subsequent activities, for example:

- Transfer of payroll results to Accounting
- Data medium exchange
- Other evaluations, for example, the payroll account or payroll journal

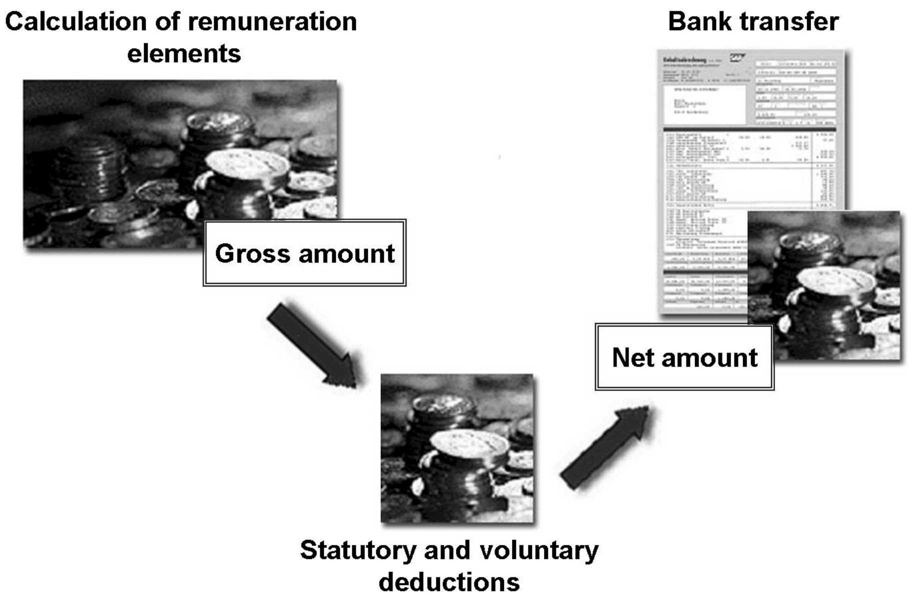

Figure 122: Payroll (2)

The calculation of remuneration comprises two main steps:

- Calculation of Remuneration Elements (Gross Amount)
- Statutory and voluntary deductions (country-specific, net amount)

These payments and deductions are included in the payment calculation by means of different wage types.

The employee is usually paid by bank transfer and the payment amount is printed in a form for the employee.

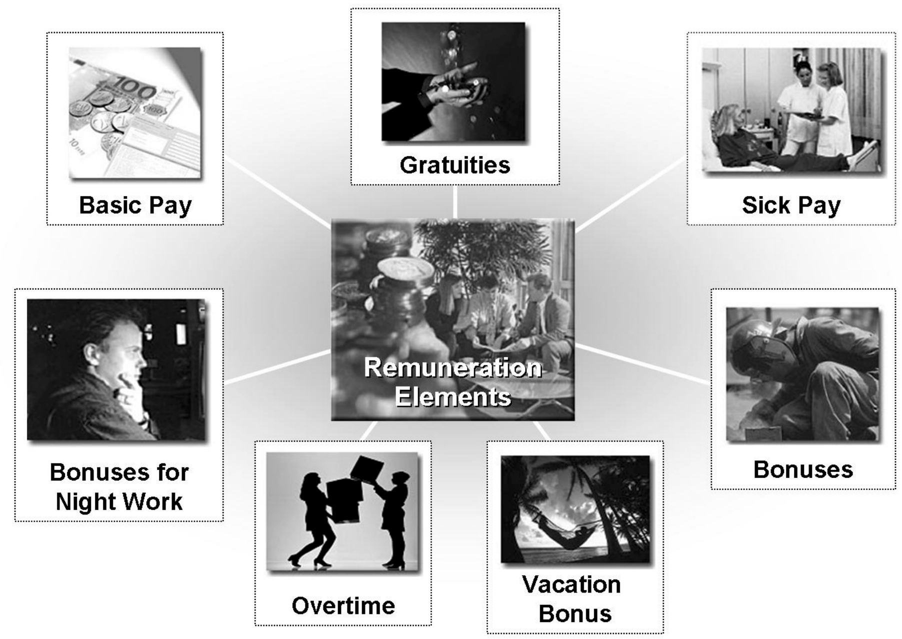

Figure 123: Calculation of remuneration elements

The remuneration elements for an employee are formed from individual wage and salary types that are used during a payroll period. Payments such as basic pay, various bonuses and gratuities are included in the remuneration calculation.

Deductions can be made for items such as a company-owned flat, company-sponsored day care or similar benefits. Different factors determine whether such benefits increase or reduce the taxable income. This is determined by the legal requirements of a country.

An employee's remuneration consists of all wage types calculated for him or her during a payroll period.

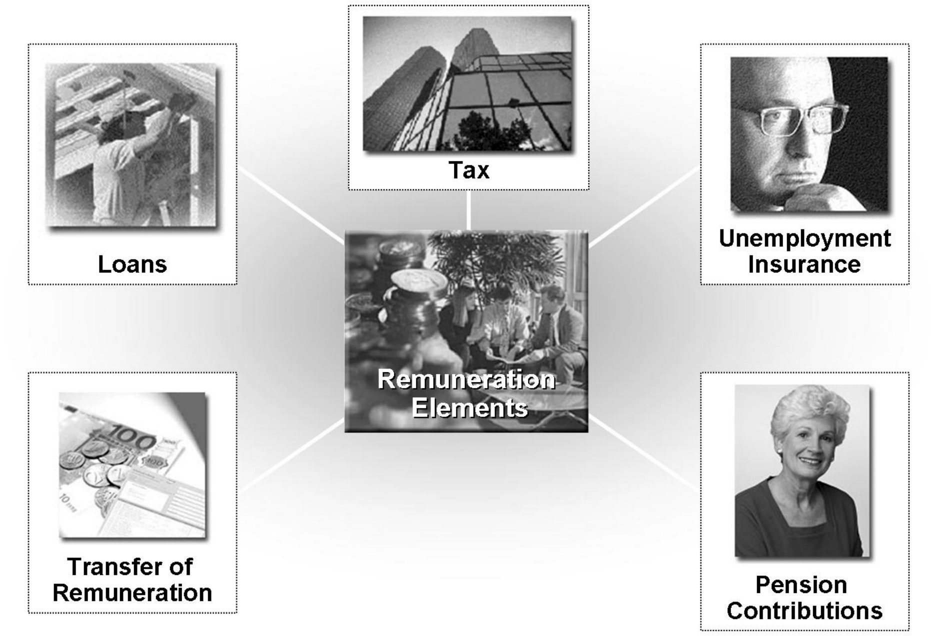

Figure 124: Statutory and Voluntary Deductions

Different gross values, for example, total gross amount and gross tax amount, are used to calculate the deductions. For this reason, different totals are formed during the payroll run, and these totals are be used for subsequent processing.

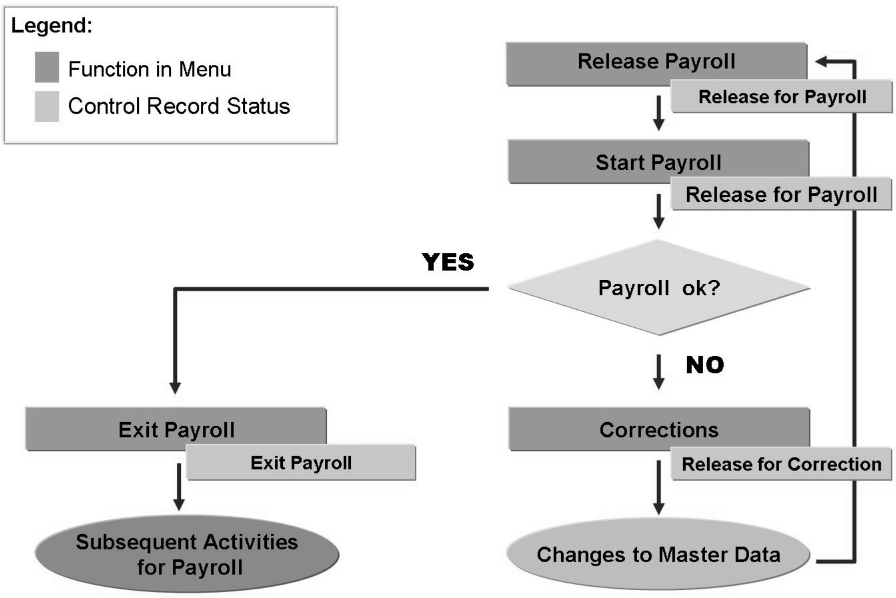

Figure 125: Payroll Administration

During the payroll run, no changes may be made to master data or time data affecting the payroll past or payroll present. The payroll program reads the master data and time data infotypes, which means that changes effected during the payroll run could jeopardize the accuracy of the payroll results. It also means that you must not run the payroll during master data maintenance. This is controlled by the payroll control record.

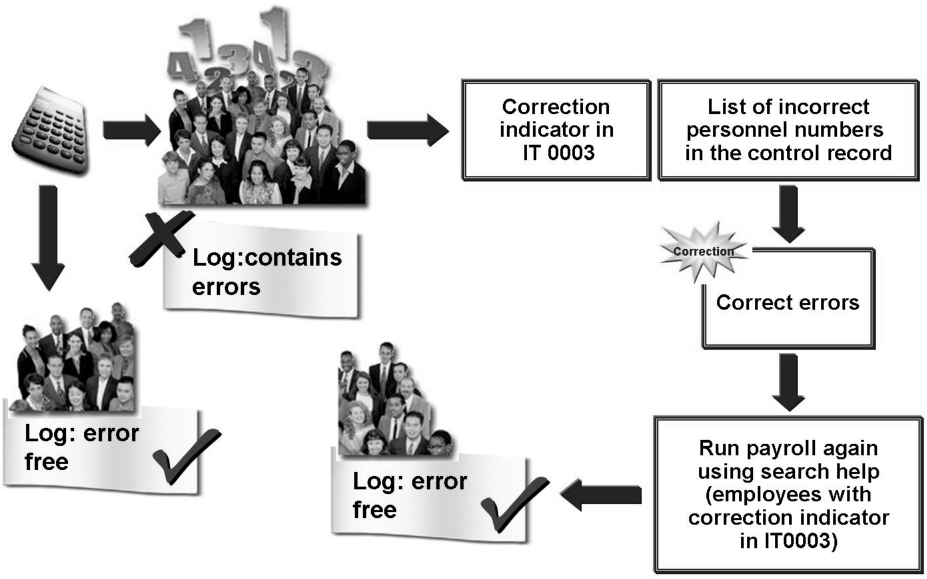

Figure 126: Correcting Incorrect Personnel Numbers

During a payroll run, the system may find errors in the master and time data. This could mean that the data does not exist, or that the data is incorrect. Payroll can be run successfully for error-free personnel numbers. A correction indicator is assigned in the **Payroll Status** infotype (0003) to personnel numbers with errors. This infotype represents the control record at the employee level.

The personnel numbers with errors are listed in the payroll log. You can also call up and print these personnel numbers using the control record.

Once these errors have been corrected, you can repeat the payroll run. This time, run payroll using the search help (Payroll correction run). This ensures that only the personnel numbers that have a correction indicator assigned to them in the Payroll Status infotype (0003) are selected.

After payroll has been run successfully for all personnel numbers, you can exit payroll.

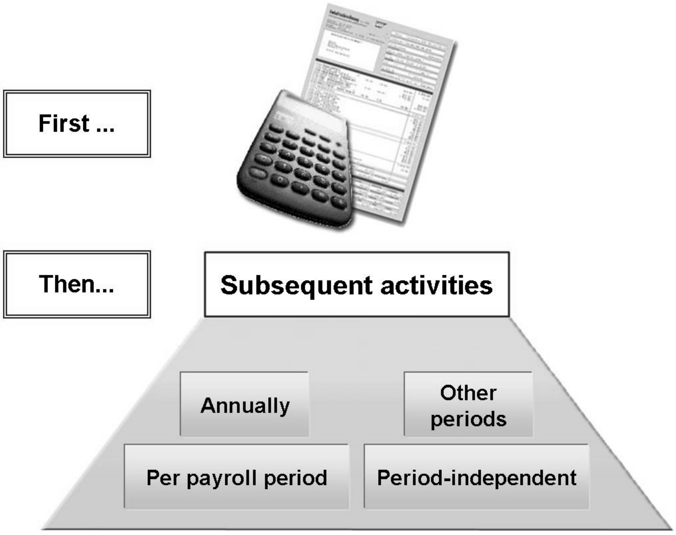

Figure 127: Subsequent Activities in Payroll Accounting

After exiting payroll, a number of subsequent activities still have to be performed. Depending on the country requirements, these are divided into the following areas.

- Per payroll period
- Annually
- Other periods
- Period-independent

All subsequent activities take place when the payroll run, remuneration statement, and wage and salary transfer activities are complete.

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Exercise 8: Payroll

Exercise Duration: 10 Minutes

Exercise Objectives

After completing this exercise, you will be able to:

- Simulate payroll for an employee

Business Example

The salary data for your employee is used in the monthly payroll run. The employees receive remuneration statements.

Task:

1. Simulate international payroll for period 01/2006 for your employee Ina Demark (11099800, payroll area X0).

   Hint: Use payroll schema *X700* and display the log and remuneration statement using the *SAP* variant.

Solution 8: Payroll

Task:

1. Simulate international payroll for period 01/2006 for your employee Ina Demark (11099800, payroll area X0).

   Hint: Use payroll schema *X700* and display the log and remuneration statement using the *SAP* variant.

   a) In the Easy Access menu, choose *Human Resources → Payroll → International → Payroll → Simulation*.

   b) In the *Payroll Period* area, enter the following data:

   c) In the *Payroll Area* field, enter the value *X0*. Select *Other Period* and enter the value *01 2005*.

   d) In the *Selection* area, enter the following data:

   e) In the *Personnel Number* field, enter the value *11099800* and in the *Payroll Area* field, enter the value *X0*.

   f) In the *General Program Control* area, enter the value *X700* in the *Payroll Schema* field.

   g) In the *Log* area, select the option *Display Log*.

   h) In the *Remuneration Statement Parameters* area, select the option *Layout for remuneration statement* and enter the value *SAP*.

   i) To start the simulation, choose *Execute*.

   j) Check the log and choose *Form* to display the remuneration statement.

Lesson Summary

You should now be able to:

- Describe the payroll process

Lesson: Personnel Cost Planning

174

Lesson Duration: 30 Minutes

Lesson Overview

In this lesson, you learn about the Personnel Cost Planning process.

Lesson Objectives

After completing this lesson, you will be able to:

- Describe the personnel cost planning process

For more information, see the Instructor Guide in SAPNet.

Business Example

Managers in your company perform personnel cost planning.

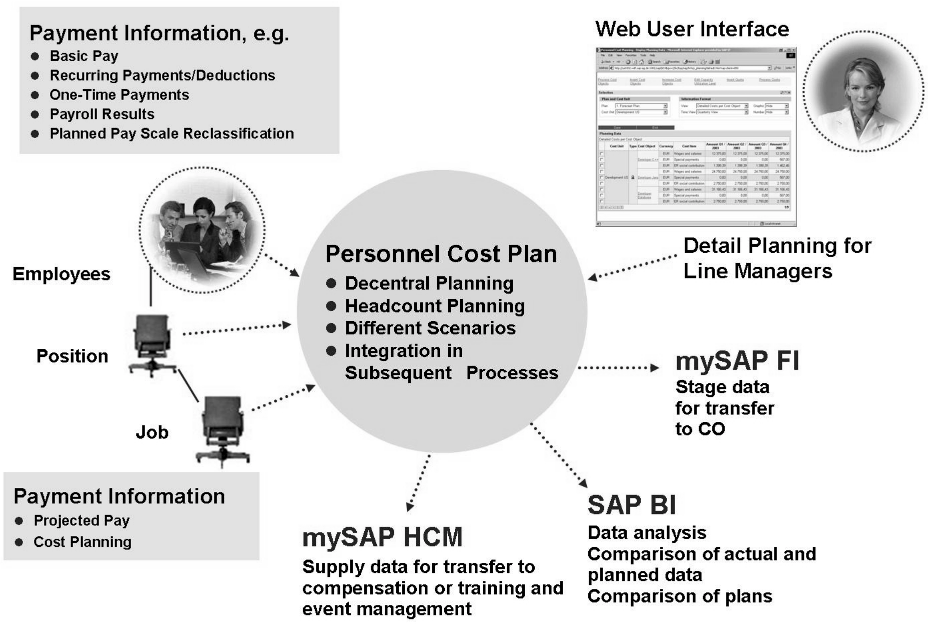

Figure 128: Personnel Cost Planning and Simulation

Personnel Cost Planning and Simulation is based on a broad data basis and is integrated with other applications. This ensures that business processes are supported across departments.

You can obtain the payment information, which you use to create personnel cost plans, from different sources. These include basic payments, payroll results, simulated reclassifications, recurring payments and deductions, and one-time payments.

You can also use the planned remuneration data for positions/jobs for planning. You can also use average calculations.

Managers have the option of making other adjustments to the plan. A Web-based front end is made available for this purpose.

Generated cost plans can be extracted to the SAP Business Information Warehouse (BI) for analysis.

After a plan has been released, the data can be used in mySAP HCM:

- To create salary budgets for Compensation Management
- To create training budgets for Training and Event Management
- To transfer planning data to Controlling

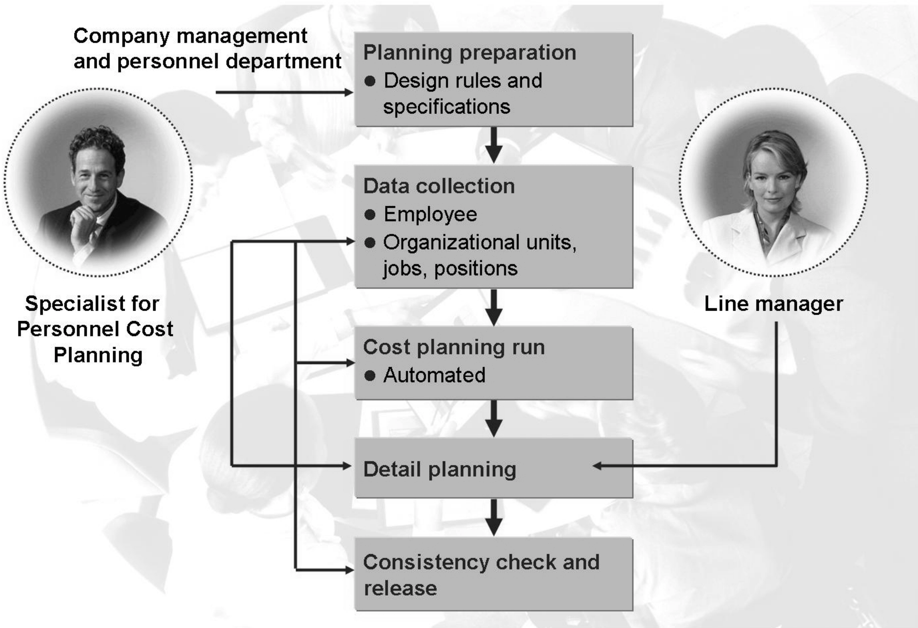

Figure 129: The Planning Process and the Roles Involved

Embedded in a strategic personnel management concept, you can implement the new component to adapt the Personnel Cost Planning to the strategic aims of your company. This means you can use suitable actions to react to changes in the company strategy at any time and, for example, to adapt the planning of new compensation models to company or market requirements.

Personnel cost analysts and managers are involved in the personnel cost planning process.

Personnel cost analysts plan, execute and monitor personnel cost planning. Managers can execute decentralized detail planning and, in this way, adjust the planning to meet the department's requirements.

Facilitated Discussion

Discussion Questions

Use the following questions to engage the participants in the discussion. Feel free to use your own additional questions.

Lesson Summary

You should now be able to:

- Describe the personnel cost planning process

Unit Summary

You should now be able to:

- Describe the process of compensation adjustment
- Describe the payroll process
- Describe the personnel cost planning process

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Test Your Knowledge

1. What does the Enterprise Compensation Management component control?

____
____
____
____

2. You must start one report for the gross payroll and one for the net payroll for each payroll period.

   Determine whether this statement is true or false.

   □ True
   □ False

3. Personnel Cost Planning can help you to perform the transfer of current payroll results to Financial Accounting and Controlling.

   Determine whether this statement is true or false.

   □ True
   □ False

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Answers

1. What does the Enterprise Compensation Management component control?

   Answer: The Enterprise Compensation Management component controls and administers your organization's compensation policies. Enterprise Compensation Management consists of the following areas: job pricing, budgeting, compensation administration, and long-term incentives.

2. You must start one report for the gross payroll and one for the net payroll for each payroll period.

   Answer: False

   A country-specific payroll program combines the remuneration elements (gross calculation) and the statutory and voluntary deductions (country-dependent net).

3. Personnel Cost Planning can help you to perform the transfer of current payroll results to Financial Accounting and Controlling.

   Answer: False

   Personnel Cost Planning is a tool for planning personnel costs. The planning data can be based on payroll results among other things. Planning data can be transferred to Controlling to enable target/actual cost comparisions to be made.

Unit 5

181

Reporting

For more information, see the Instructor Guide in SAPNet.

Unit Overview

- Standard Reports
- Human Resources Information System
- Manager's Desktop
- Ad Hoc Query
- Manager Self-Service (MSS)

Unit Objectives

After completing this unit, you will be able to:

- Start standard reports
- Explain the Human Resources Information System
- Describe the Manager's Desktop
- Explain the Ad Hoc Query
- Describe Manager Self-Service

Unit Contents

Lesson: Reporting

182

Lesson Duration: 60 Minutes

Lesson Overview

In this lesson, you learn about the different reporting options.

Lesson Objectives

After completing this lesson, you will be able to:

- Start standard reports
- Explain the Human Resources Information System
- Describe the Manager's Desktop
- Explain the Ad Hoc Query
- Describe Manager Self-Service

For more information, see the Instructor Guide in SAPNet.

Business Example

The various departments in your enterprise must regularly perform reporting. They do so using the different reporting options offered in the SAP system.

Standard Reports

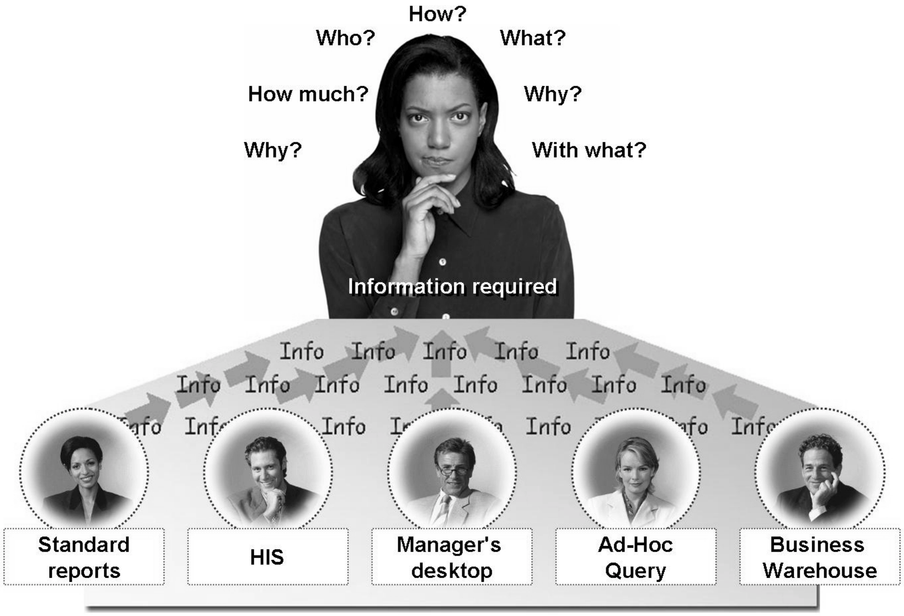

Figure 130: Reporting: Overview

You can access **standard reports** from the SAP Easy Access Menu or using general report selection.

The **Human Resources Information System** (HIS) makes it easy for you to request and start all HR reports within Structural Graphics.

Manager's Desktop is a tool specifically for managers in which they can evaluate and change data.

Ad-Hoc-Query enables you to create reports flexibly. Although it is called InfoSet Query in other SAP system components, it remains Ad Hoc Query within Human Capital Management.

The **Business Warehouse** is an independent system in which analyses can be performed. SAP delivers business data in the form of Business Content.

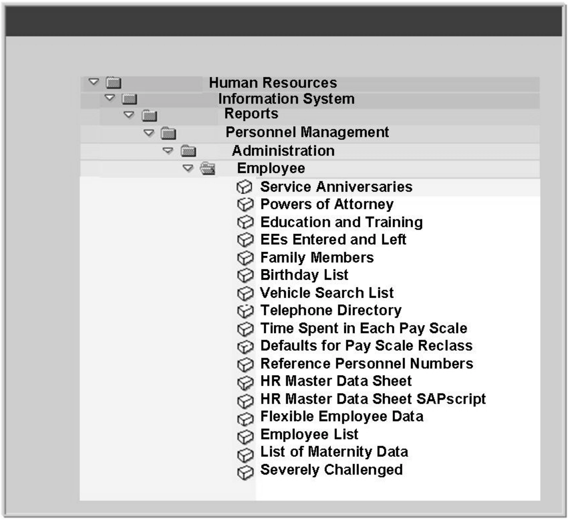

Figure 131: Information System Reports

SAP provides tools for creating your own reports, as well as a large number of important standard reports for all SAP applications. You start the reports from the main Information System in the SAP Easy Access menu or from any of the information systems of the components or subcomponents.

When you call the Information System of the Human Resources component, you can start a standard report or create a report using one of the tools (Ad Hoc Query, SAP Query, HIS). Reports that you create with the Ad Hoc Query or SAP Query can be saved and inserted in the structure containing the standard reports.

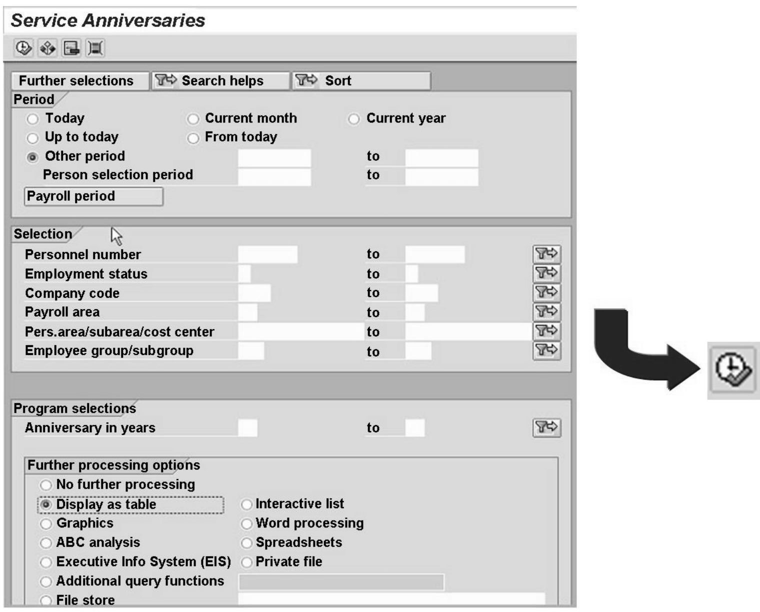

Figure 132: Report Selection Screen (Example)

The report selection screen contains a series of selection options that enable you to determine the criteria used to execute a Human Resources report. There are two fields available for each selection option in which you can enter either a single value or a value range. By choosing specific selection options and values, you can determine the dataset to be read and the result of the report. The latter is derived from the evaluation of employee records and is output either as a list of employees, or as a numerical analysis of data on these employees.

To make generic entries, use *. To make masked entries, use +.

Human Resources Information System

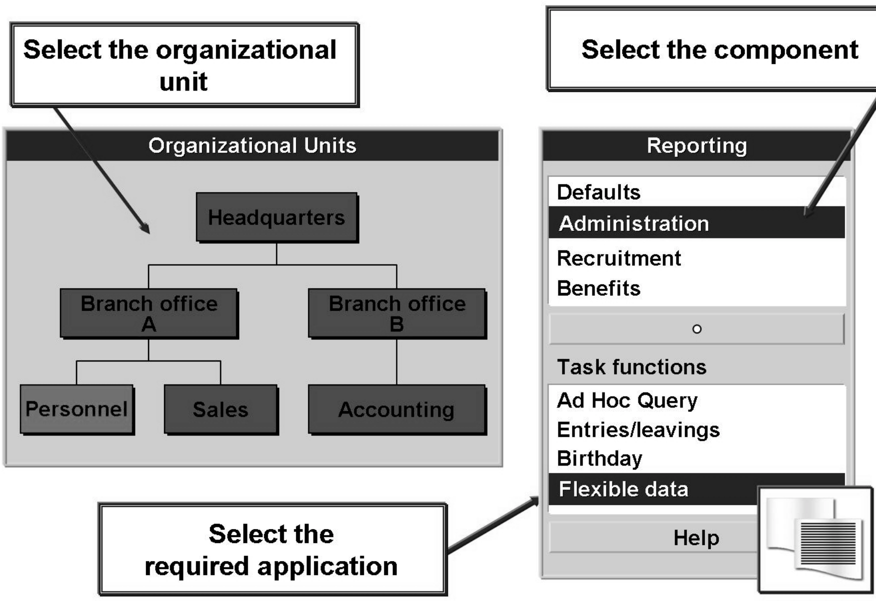

Figure 133: Human Resources Information System

The graphic displays the requested organizational structure. A second window lists the available reports.

The upper section of the window lists the areas available. After you have selected an area, the reports available for this area are listed in the lower section of the window.

If you have selected at least one object in the graphic, the report is started. The report results are displayed in an additional window.

Manager's Desktop

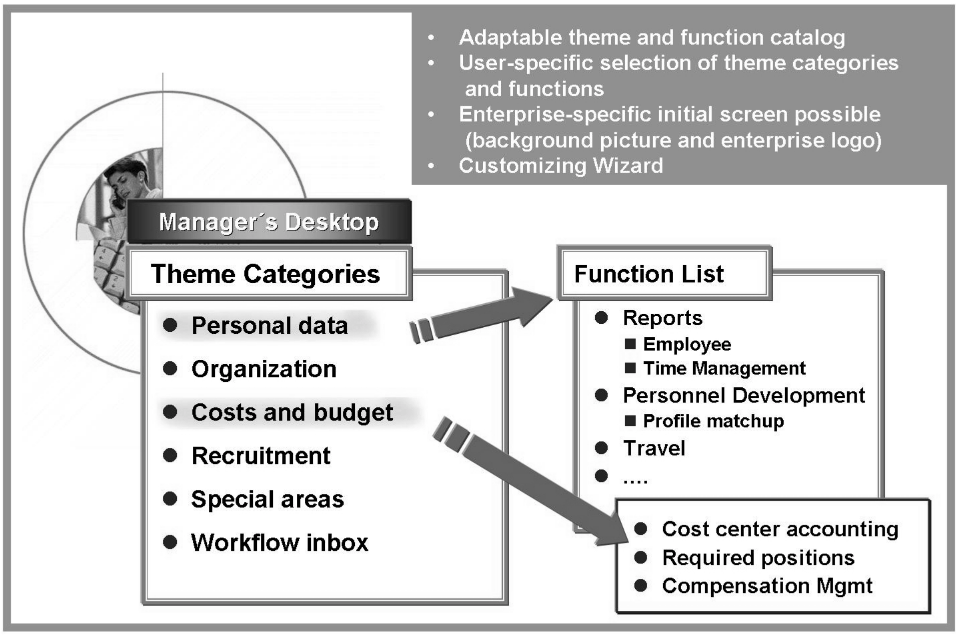

Figure 134: Manager's Desktop Initial Screen

The initial screen provides an overview of the default overall scenario in the Manager's Desktop, which consists of the five theme categories listed above and their function lists.

The function codes in Customizing can be used to put these categories into customer-specific hierarchies. The categories can also be enhanced with customer-specific functions.

Furthermore, the user can deactivate unnecessary categories and functions on the initial screen and on the various screens of the different application components. It is always possible to switch between user settings and standard settings.

The initial screen can be adapted to customer-specific requirements in Customizing. For example, it can be enhanced with an enterprise logo and/or background picture.

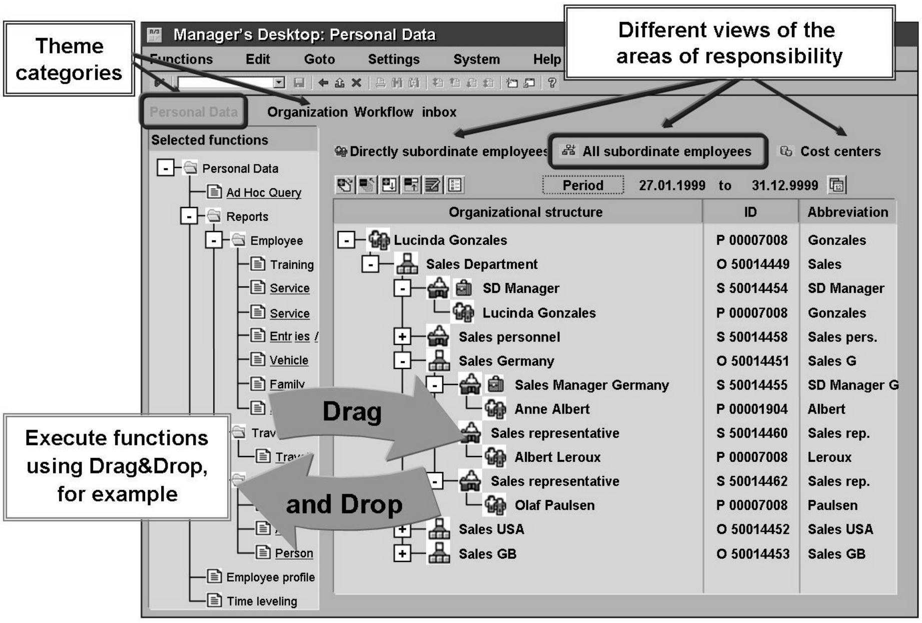

Figure 135: Working with Manager's Desktop

The screen is divided into two areas: the right area displays the area of responsibility, the left displays the possible functions arranged in a function tree.

The tab pages on the right enable you to generate different views of the organizational structure for your area of responsibiility. Organizational objects are displayed for which the functions on the left can be executed.

Ad Hoc Query

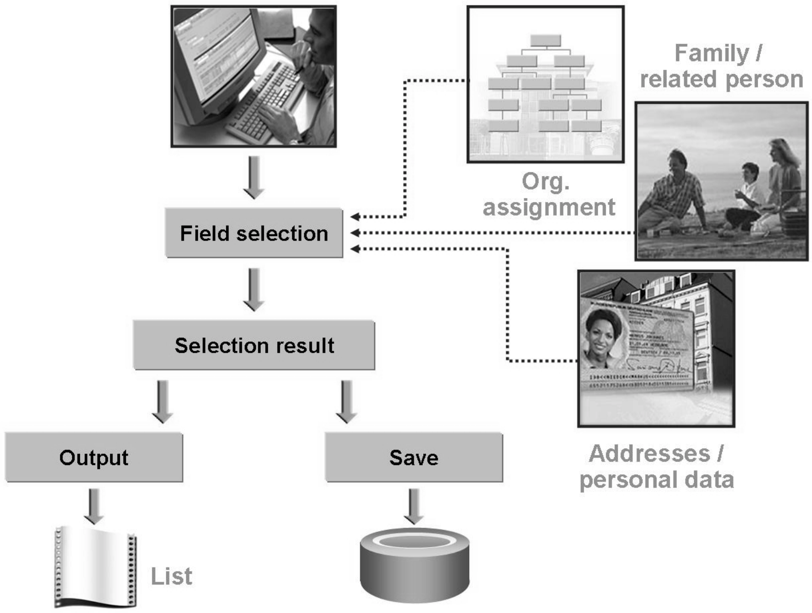

Figure 136: Ad Hoc Query

The Ad Hoc Query is a simple but powerful tool for reporting on HR data. It enables you to access data from all Human Resources areas by choosing selection and output fields.

The Ad Hoc Query can be used for data stored in Recruitment, Master Data, Time Management, and Personnel Planning and Development (person-related data).

Programming skills are not required. You choose the selection and output fields on a screen.

Hint: Unlike all other reporting tools, the selection is made directly from the database. In other words, personnel numbers are only selected if they meet the criteria. Accessing the database directly significantly improves performance.

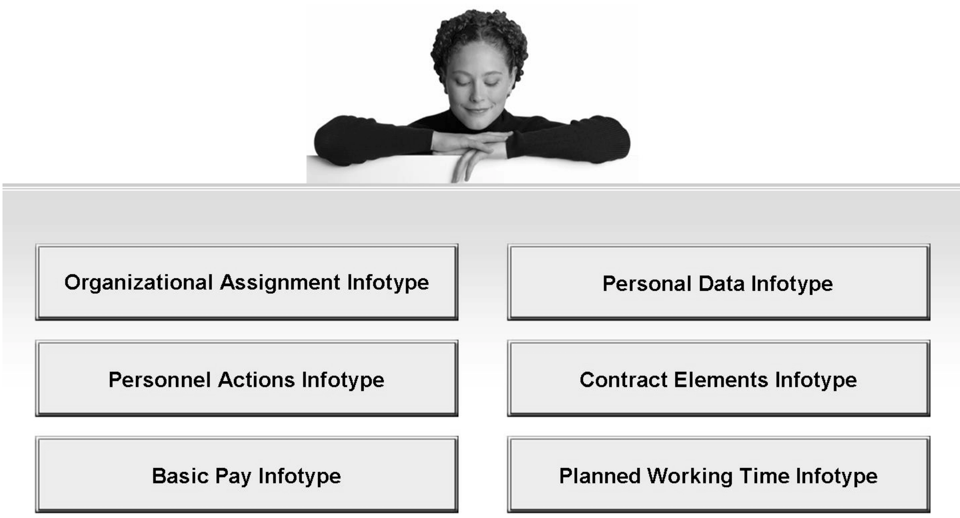

Figure 137: Infotype Selection

You can combine infotypes of a logical database to form an Infoset.

The graphic displays infotypes from the PNPCE database.

You define per infotype the fields that are available for selection in the InfoSet.

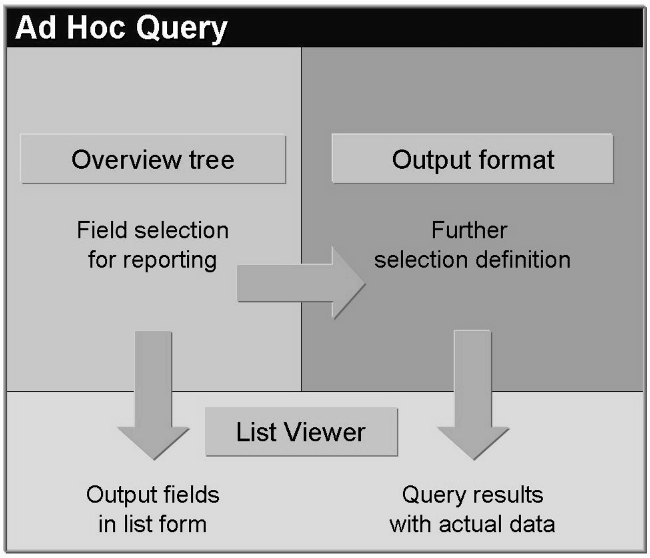

Figure 138: Ad Hoc Query Screen: All Functions

InfoSets and user groups form the basis of the Ad Hoc Query. You specify both of these in the SAP Query. InfoSets are assigned to user groups which, in turn, group users together. InfoSets enable you to group infotype fields and calculated fields together as required.

From the hit list, you can specify further values before the final output.

Queries can be saved and reused for similar queries in the future.

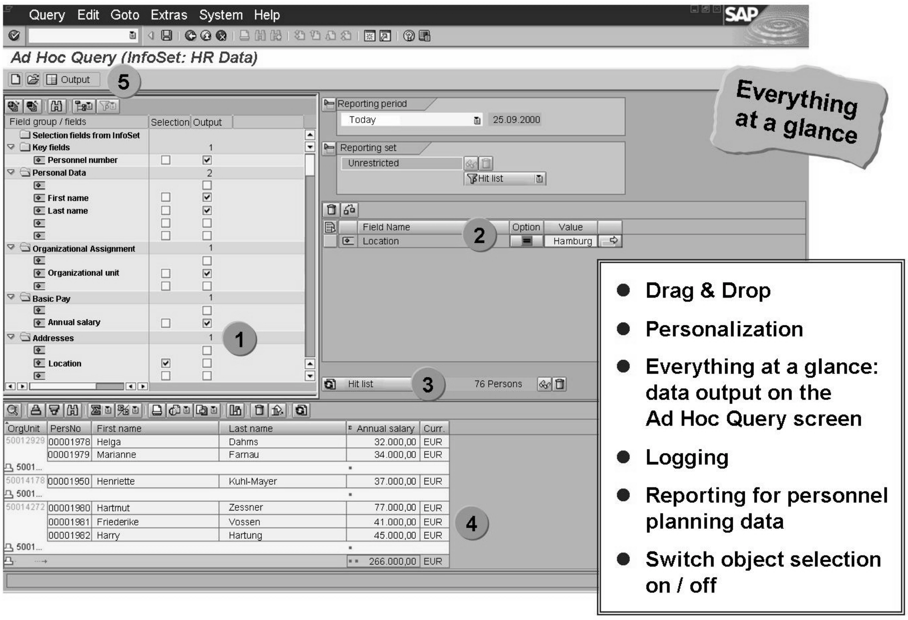

Figure 139: The Ad Hoc Query: Overview

You can select **selection and output** fields per **Drag&Drop**. To do so, you select one or more fields and drag them to the required area (selection area or output area). In the case of fields that have both **values** and **texts**, you can specify whether only the text, only the value, or both is used.

Your **user settings** will be loaded the next time you start the Ad Hoc Query, for example, the queries you last requested. This applies whether you exit the Ad Hoc Query or log off from the system.

In the **output preview** you can display **real data**.

BI and SEM

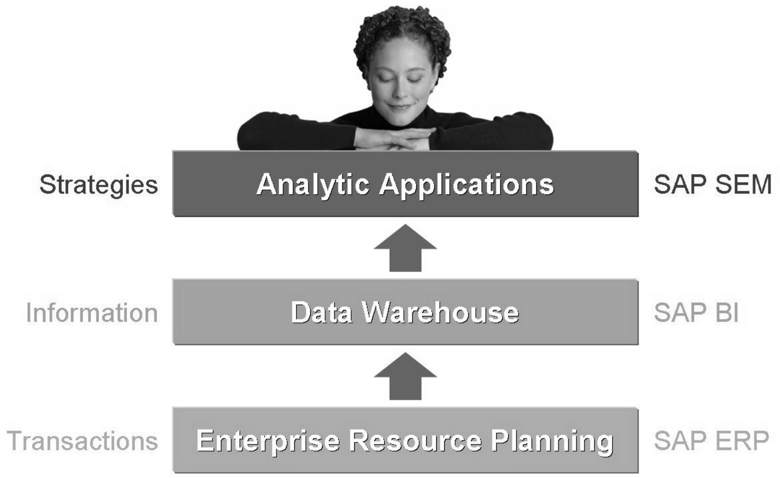

Figure 140: SAP ERP, BI and SEM

In addition to reporting in the SAP ERP system, further options exist for analyzing data:

- SAP Business Warehouse (BI)
- SAP Strategic Enterprise Management (SEM)

SAP BI is a standalone system where reporting can be performed. SAP delivers Business Content for the SAP BI system.

With SEM, SAP offers a complete solution for strategic enterprise management that includes the Balanced Scorecard, Risk Management, and Management Cockpit.

Manager Self-Service (MSS)

Human resources work without Manager Self-Service

- Heavy workload for managers due to administrative tasks
- Decision-making involves searching for and collating information from several sources
- Processes (such as employee reviews) still involve a lot of paperwork
- Result:
  - Inefficient
  - Decisions are made on the basis of inadequate information
  - Time-consuming
  - Overworked managers

What is SAP Manager Self-Service?

- SAP Manager Self-Service (SAP MSS) is an intuitive, easy-to-use portal-based application that supports managers in their daily work.
- MSS comprises multiple intuitive Web applications that enable managers to display, create, and edit data in SAP systems using a browser.
- SAP MSS covers the following subject areas:
  - Attendances
  - Employee reviews
  - Employees' change requests
  - Monitoring
  - Reporting
  - Recruitment
  - Compensation planning
  - Quota planning

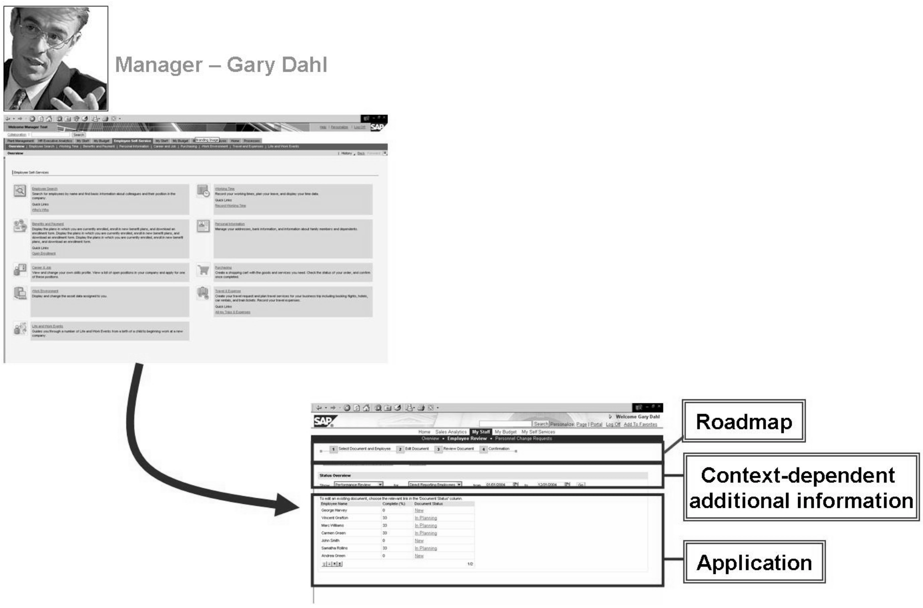

Figure 141: MSS Look and Feel

The design and navigation of MSS and ESS on the initial screen is very similar. As in ESS, in MSS the manager starts by selecting an area with a link. There is a brief description of the content of the area displayed for the manager's information.

A roadmap guides the manager through complex subject areas.

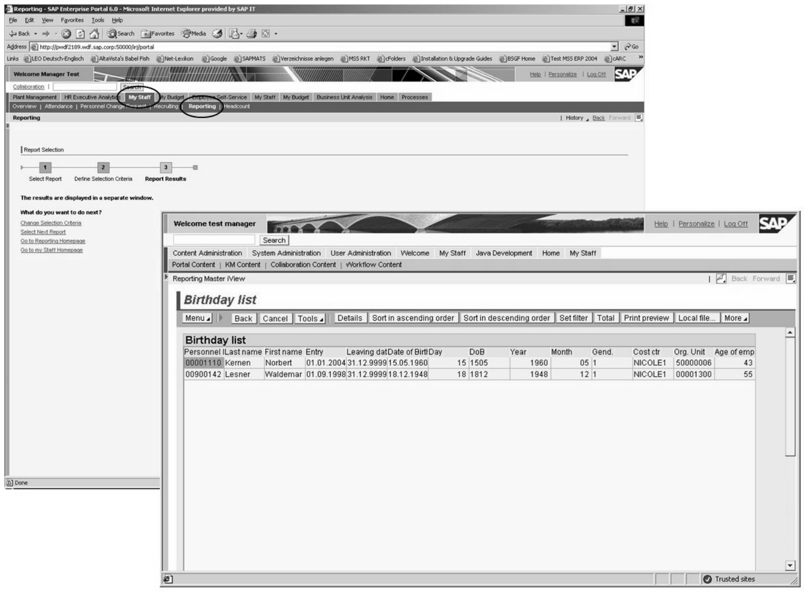

Figure 142: MSS - Example: Reporting

Manager Self-Service (MSS) supports line managers, project and team leads in the execution of their tasks and makes the relevant information readily available to them.

Manager Self-Service contains multiple reporting and evaluation options on the basis of SAP ERP standard reporting and the SAP Business Information Warehouse (SAP BI). The manager first selects a report and then specifies selection criteria for the report. The slide shows the result of a requested report (Birthday List). Even customers who have not implemented SAP BI can use MSS without difficulty.

HR business processes can still be triggered from the portal: for example, after an employee review, the manager can trigger a special payment to the employee from the portal.

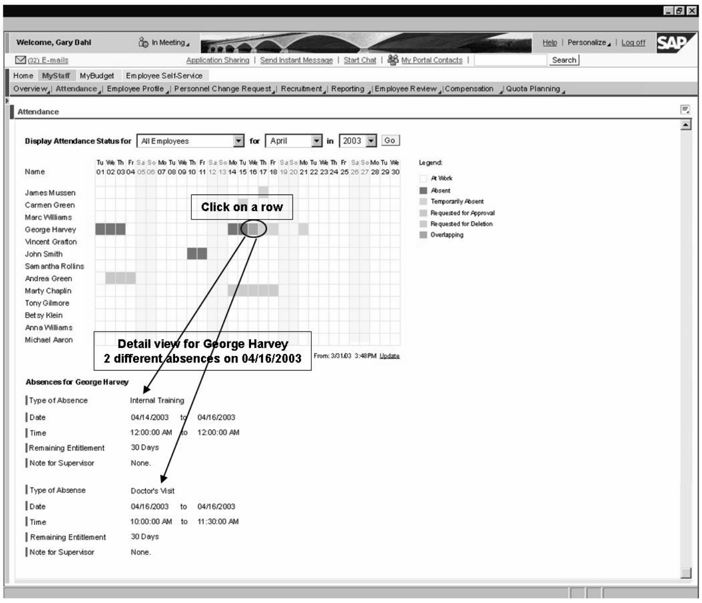

Figure 143: MSS – Team Calendar

The Team Calendar shows the manager at a glance which of the team is available. The following attendance statuses exist:

- At work – the employee is at work for the whole day.
- Absent – the employee is absent from work for the whole day.
- Partially absent – the employee is absent for one or more time blocks on one day.
- Multiple entries (new) – the employee has multiple absences during one period (for example, Monday – Wednesday Training, and also a doctor's appointment on Wednesday from 10:00 to 11:30 a.m.).
- Submitted for approval (new) – the employee has submitted an absence request for a given day.
- Submitted for deletion (new) – the employee has submitted a request to cancel an absence notification.

195

Exercise 9: Reporting (Optional)

Exercise Duration: 10 Minutes

Exercise Objectives

After completing this exercise, you will be able to:

- Start standard reports

Business Example

The system provides a number of standard reports for commonly requested queries and reports. You can define your own selection criteria and adjust the output to suit your specific requirements.

Task 1:

1. Lars Becker has handed in his notice today. Use the personnel action *Termination* to allow Lars Becker (111991##) to leave the company. The leaving date is calculated on the basis of the notice period specified in his contract, which is *3 months to the end of the month*.

   Hint: Do not create a vacancy for the position he is vacating. Skip the Bank Details and Basic Pay infotypes by choosing Next record.

Task 2:

1. Use the report Entries/Leavings to display all leavings for the current and next year. When you do so, make your selection on the basis of the personnel area CABB and subarea 0003.

Task 3:

1. Use the *Birthday List* report to display a list of all employees in the personnel area *1000* that are aged between *45* and *55* this year.

Solution 9: Reporting (Optional)

Task 1:

1. Lars Becker has handed in his notice today. Use the personnel action *Termination* to allow Lars Becker (111991##) to leave the company. The leaving date is calculated on the basis of the notice period specified in his contract, which is *3 months to the end of the month*.

   Hint: Do not create a vacancy for the position he is vacating. Skip the Bank Details and Basic Pay infotypes by choosing Next record.

   a) Call the transaction *Personnel Actions* from your favorites or in the Easy Access menu, choose *Human Resources → Personnel Management → Administration → HR Master Data → Personnel Actions*.

   b) In the *Personnel Number* field, enter the value *111991##*.

   c) In the Start field, enter the date calculated on the basis of the required notice period, select the action *Termination* and start the action by choosing *Execute*.

   d) Choose *Save* to save the *Actions* infotype, and confirm the delimitation of the existing infotype record by pressing *Enter*.

   e) Answer *No* to the query about creating a vacancy.

   f) Skip the Bank Details and Basic Pay infotypes by choosing *Next record*.

Continued on next page

Task 2:

1. Use the report Entries/Leavings to display all leavings for the current and next year. When you do so, make your selection on the basis of the personnel area CABB and subarea 0003.

    a) Start the transaction from the Easy Access menu: *Human Resources → Information System → Reports → Personnel Management → Administration → Employee → EEs Entered and Left*.

    b) Enter the values *CABB* and *0003* in the *Personnel Area* and *Personnel Subarea* fields respectively.

    c) In the *Leaving Date* field, enter *01/01/ of the current year* and in the *to* field, enter *12/31 of next year*.

    d) Start the report by choosing *Execute*.

    e) Choose *Back* to exit the output list.

Task 3:

1. Use the *Birthday List* report to display a list of all employees in the personnel area *1000* that are aged between *45* and *55* this year.

    a) Start the transaction from the Easy Access menu: *Human Resources > Information System > Reports > Personnel Management > Administration > Employee > Birthday List*.

    b) Enter *1000* in the *Personnel Area* field.

    c) Enter *45* in the *Age* field and *55* in the *to* field.

    d) Start the report by choosing *Execute*.

    e) Sort the output list by age in ascending order.

    f) Click the header of the *Age* column and choose *Sort in ascending order*.

    g) Choose *Back* to exit the output list.

Lesson Summary

You should now be able to:

- Start standard reports
- Explain the Human Resources Information System
- Describe the Manager's Desktop
- Explain the Ad Hoc Query
- Describe Manager Self-Service

Unit Summary

You should now be able to:

- Start standard reports
- Explain the Human Resources Information System
- Describe the Manager's Desktop
- Explain the Ad Hoc Query
- Describe Manager Self-Service

Test Your Knowledge

201

1. Reporting is used to ...

   Choose the correct answer(s).

   □ A Store reports in the system.

   □ B Transfer employees.

   □ C Perform data evaluations and analyses.

202

Answers

1. Reporting is used to ...

   Answer: C

Unit 6

203

Course Overview

Further information can be found in the Instructor Guide in SAPNet.

Unit Overview

This unit introduces the course. The most important goals of the entire course are also given here.

Unit Objectives

After completing this unit, you will be able to:

- Explain the goals and objectives of this course
- Understand the roles and the portals
- Describe the main business scenario
- Set up favorites and user profiles

Unit Contents

Lesson: Course Overview

204

Lesson Duration: 30 Minutes

Lesson Overview

This lesson serves as an introduction to the course.

Lesson Objectives

After completing this lesson, you will be able to:

- Explain the goals and objectives of this course
- Understand the roles and the portals
- Describe the main business scenario
- Set up favorites and user profiles

For more information, see the Instructor Guide in SAPNet.

Business Example

You work for an enterprise that sells bicycles and equipment. You are a member of the project team responsible for implementing mySAP HR.

You work in close cooperation with your colleagues in the HR department, as well as with colleagues from other departments. Your tasks include setting up the SAP system in accordance with your enterprise's requirements and supporting the HR department in their day-to-day activities. Additional tasks include actively cooperating and working with the HR department in all activities that arise daily or periodically.

mySAP ERP

Role Concept

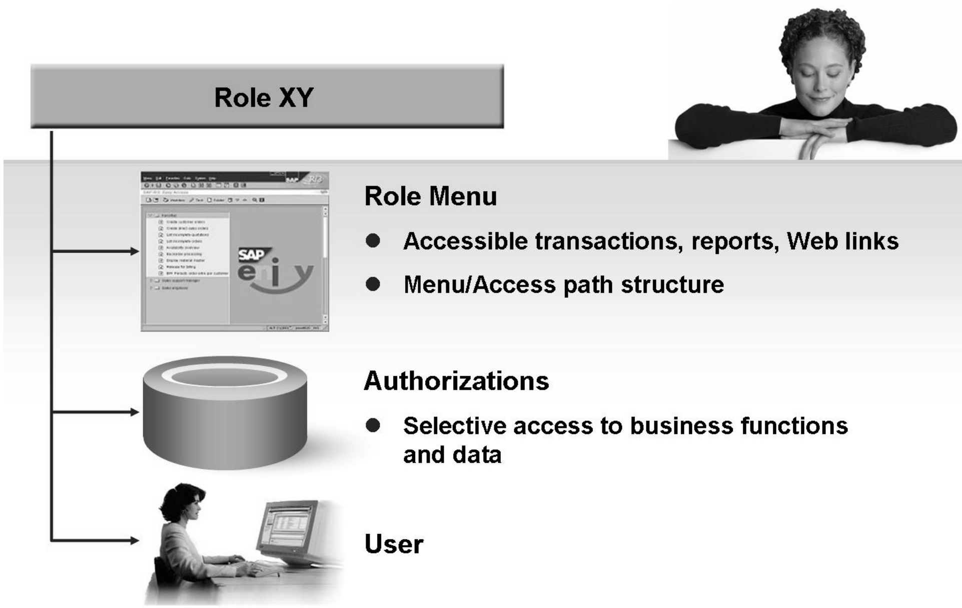

Figure 144: Role Concept

Authorizations and the corresponding menu structure are linked to a role. A role is then assigned to users with the same area of responsibility.

Enterprise Portal

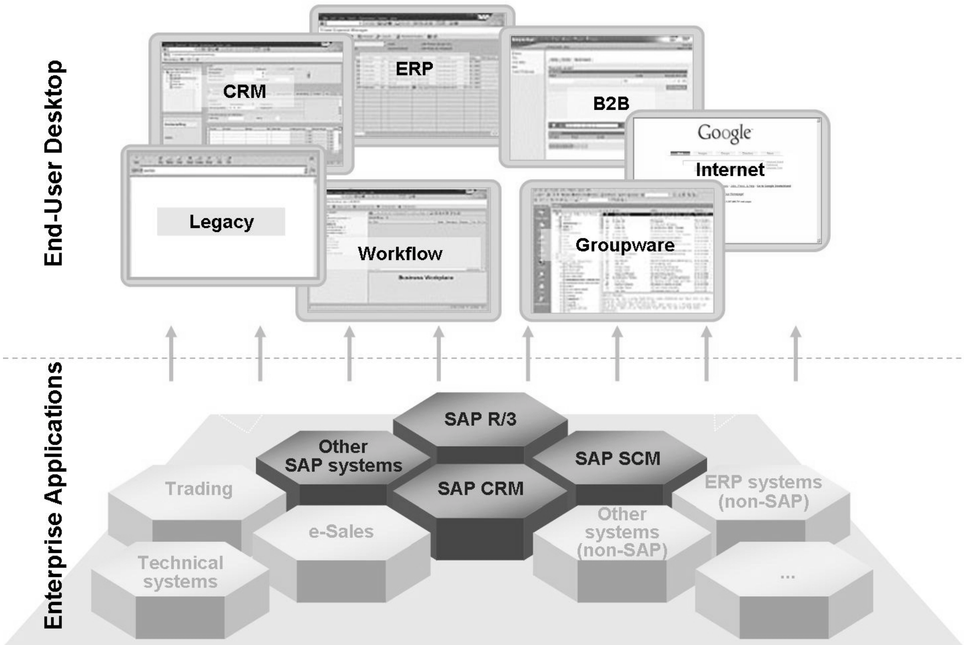

Figure 145: Enterprise Portal: Challenge - Too Many End-User Interfaces

- The e-Business era has often resulted in companies having very complex IT landscapes. These include different applications, services, and information.
- Users need access to the various services to perform their tasks. Access is usually through special programs on the desktop and different logons.
- In many companies today, the end user is thus confronted with a range of different interfaces for various applications, each of which operates differently.
- SAP Enterprise Portal provides a solution to this problem by integrating these applications into one single interface.
- The target group is not limited to the employees of a company - with an external portal you can also reach business partners, customers, or any interested parties.

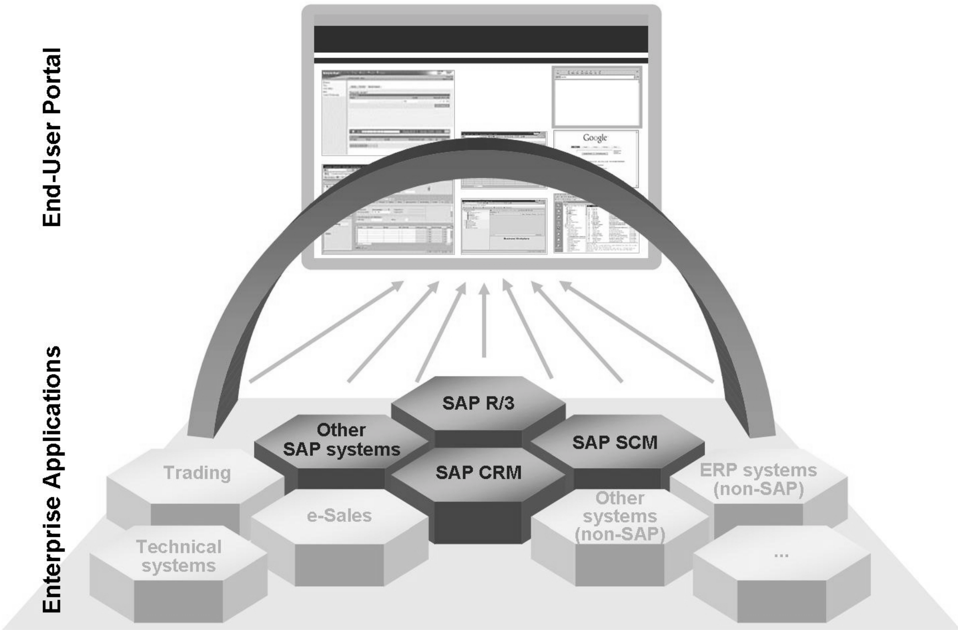

Figure 146: Single Sign-On in the Enterprise Portal

The Enterprise Portal displays information from several sources (SAP systems) on one page. The use only needs to log on once to the Enterprise Portal. If a user and password for the other background systems is saved in the Enterprise Portal for each user, or if the Enterprise Portal has a “Trusted Systems Link” to the systems, then the Enterprise Portal performs all other logons.

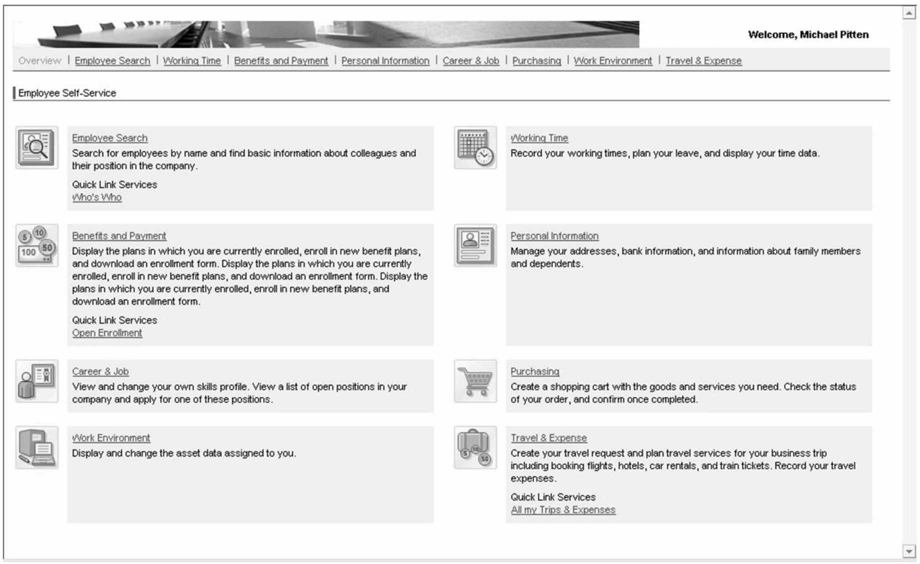

Figure 147: ESS Homepage (Area Group Page)

- The homepage oder area group page is the start page for the Employee Self-Service application.
- The end user can call various information from here.
- For example, the user can start the service to change his or her address data.

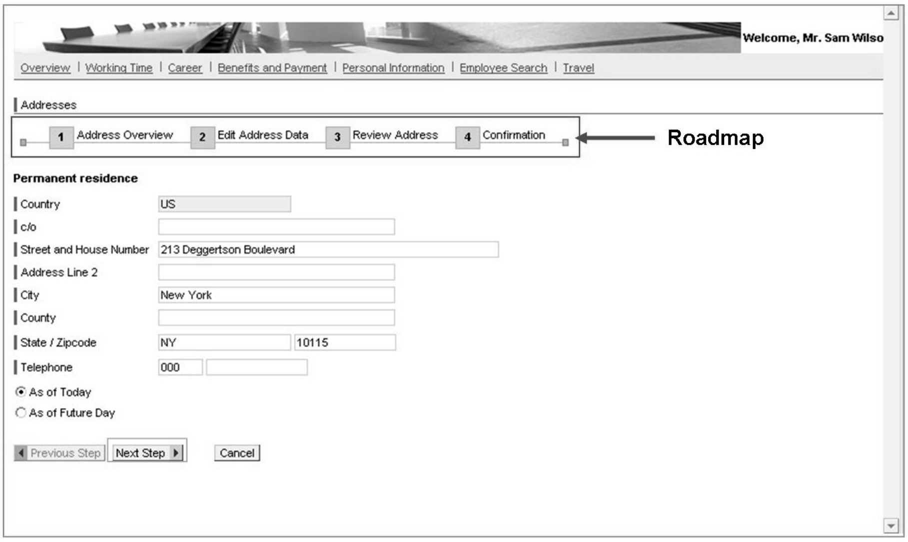

Figure 148: ESS Service: Personal Data - Change Address

- The graphic shows an example of the Personal Information service. The employee wants to change his or her address.
- The employee is guided through the individual steps of a roadmap.
- The fields to be maintained are displayed in screens that are easy to understand.
- When the employee saves the changes, the changes also take effect in the connected mySAP ERP system. During processing, the employee's personnel number is locked in the mySAP ERP system. The system message “Data has been saved” also refers to the data in the SAP system.

User Profile and Favorites

- By setting up a user profile and favorites, you can save yourself work.
- A user profile has the following effect:
  - Predefinition of fields in Customizing and in the application (for example, country assignment)
  - Program control (for example, user group)
- By setting up favorites, you can access frequently used transactions quickly.

Figure 149: User Profile and Favorites

By setting up user profiles, values such as the personnel country grouping can be predefined in Customizing. You can also have a differentiated program control if you enter a user group (see the units on infotypes and actions). By setting up favorites, you can access frequently used transactions quickly.

211 Exercise 10: Course Overview

Exercise Duration: 10 Minutes

Exercise Objectives

After completing this exercise, you will be able to:

- Set user parameters and roles

Business Example

You want to store information in your HR305-## user to make your day-to-day work with the system a lot easier, and assign yourself a role that contains only the transactions relevant for you.

Task 1:

Check if the following user parameters are set:

Note that ## corresponds to your group number, in this case ______.

1. Country grouping (MOL) = 99
2. User group (UGR) = ##+50

   This means, for example, for Group 01 UGR=51, for Group 02 UGR=52, and so on.

Task 2:

1. Assign your user the *T_HR305* role.

Task 3:

1. Which path do you follow in the Easy Access Menu to call master data maintenance?

   ____

Task 4:

1. Save master data maintenance as a favorite and rename it.

Solution 10: Course Overview

Task 1:

Check if the following user parameters are set:

Note that ## corresponds to your group number, in this case ______.

1. Country grouping (MOL) = 99
   a) Menu: *System → User Profile → Own Data*

      Choose the *Parameter* tab page.

      Make the following entries:
   b) Country grouping (MOL) = 99
2. User group (UGR) = ##+50

   This means, for example, for Group 01 UGR=51, for Group 02 UGR=52, and so on.
   a) User group (UGR) = ##+50.
   b) This means, for example, for Group 01 UGR=51, for Group 02 UGR=52, and so on.

Task 2:

1. Assign your user the *T_HR305* role.
   a) On the initial screen, choose *Other Menu* and select the *T_HR305* role (double click).
   b) Choose *Assign users* and enter your user ID (HR305-##). In the dialog box that appears, confirm the automatic user master comparison by choosing *OK*.

Task 3:

1. Which path do you follow in the Easy Access Menu to call master data maintenance?

   ____
   a) *Human Resources → Personnel Management → Administration → HR Master Data → Maintain*

Continued on next page

Task 4:

1. Save master data maintenance as a favorite and rename it.
   a) Move entry to Favorites folder using Drag&Drop
   b) Rename: *Right mouse key → Change Favorites*
      Or: *Favorites Menu → Change*

Lesson Summary

You should now be able to:

- Explain the goals and objectives of this course
- Understand the roles and the portals
- Describe the main business scenario
- Set up favorites and user profiles

Unit Summary

You should now be able to:

- Explain the goals and objectives of this course
- Understand the roles and the portals
- Describe the main business scenario
- Set up favorites and user profiles

Unit 7

217

Hiring an Employee

Further information can be found in the Instructor Guide in SAPNet.

Unit Overview

In this unit, an employee is hired by our company. The application side is shown.

Unit Objectives

After completing this unit, you will be able to:

- Discuss the special features of Human Resources in your company and describe the enterprise structure
- Hire a new employee

Unit Contents

Lesson: Hiring an Employee

218

Lesson Duration: 60 Minutes

Lesson Overview

Hiring an employee in our company with the help of a personnel action.

Lesson Objectives

After completing this lesson, you will be able to:

- Discuss the special features of Human Resources in your company and describe the enterprise structure
- Hire a new employee

Further information can be found in the Instructor Guide in SAPNet.

Business Example

You are an administrator in your company. The company has implemented a variety of SAP products. You are responsible for the Personnel Management component.

Until now, you have been more involved in the application side of the products. In the future, you want to be more involved in the implementation of the Human Capital Management system.

General Structure of Your Company

Figure 150: You Are a Personnel Administrator in Your Company

Your company sells bicycles and accessories. Head office, Sales, and Purchasing are located on the same site.

A year ago, the company decided to restructure the existing IT systems. The company chose to replace the old systems with the mySAP ERP system. All components were implemented at the same time.

You have been employed as a personnel administrator at your company for several years. You are responsible for all tasks in the HR department. Until now, you have not been involved to a large extent in the implementation of the system. You want to rectify this in the coming days.

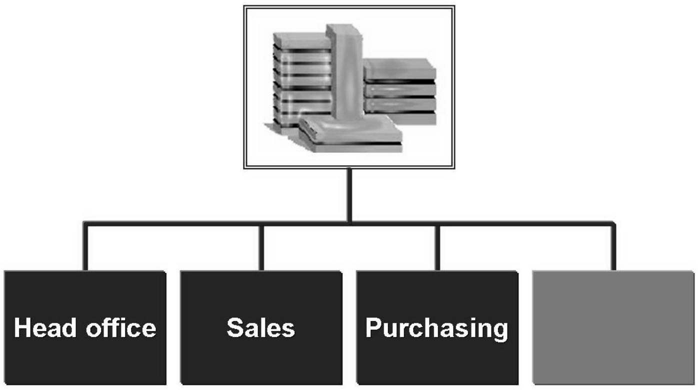

Figure 151: Enterprise Structure of Sales Company

The graphic shows the enterprise structure of your company.

1	Managing Director
3	Sales directors, one per location
19	External sales persons (to be hired)
5	Internal sales persons
5	Purchasers
10	Administrative assistants, 5 full-time, 5 part-time (50%)
1	Full-time administrator in the Accounting Department
1	Full-time administrator in the HR Department
1	Part-time administrator in both the Accounts and HR Departments (both 50% part-time)
4	System administrators with rotating shifts
1	Gardener for tending the grounds
1	Janitor
4	Security personnel working rotating shifts

Figure 152: Employee List

The graphic shows the enterprise structure of your company.

Figure 153: SAP Products Implemented

Your company replaced the old system one year ago, implementing the mySAP ERP 2004 system as a replacement. The implementation took place with the support of consultants.

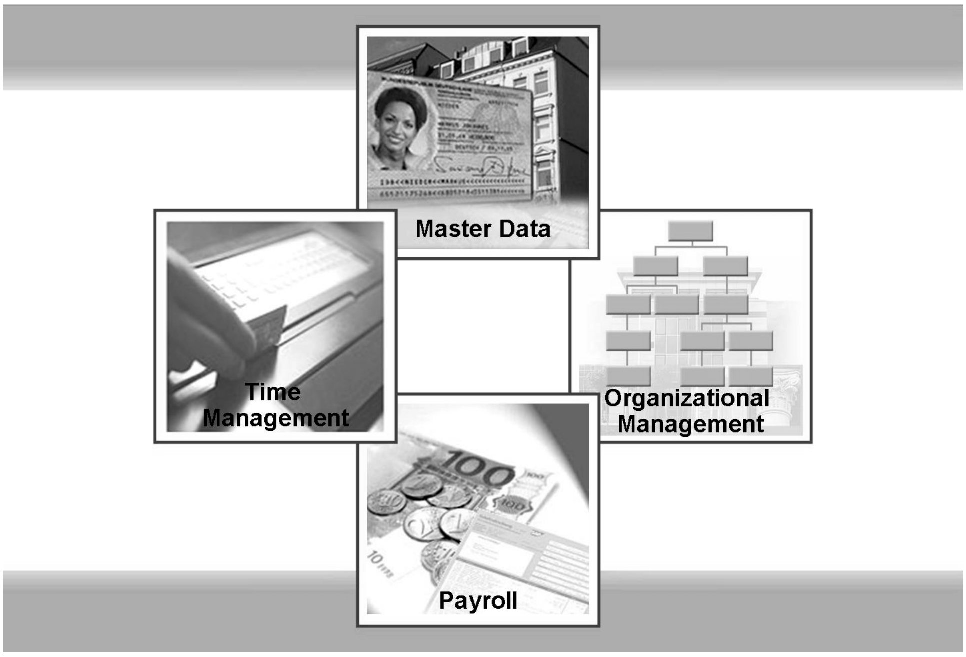

Figure 154: Human Resources Data

In the Human Resources area, your company is using the following components: Master Data, Time Management, Payroll, and Organizational Management.

A New Employee's HR Master Data Sheet

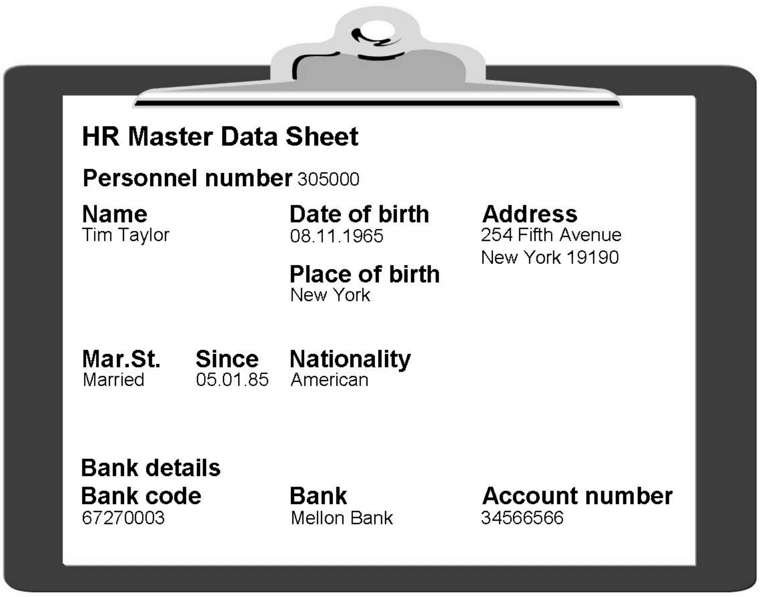

Figure 155: A New Employee's HR Master Data Sheet (1)

If you want to retain a new employee's hire data, you can take the details from the employee's files. You can use a hiring action to transfer this data into the SAP system. The graphic is an example of a HR master data sheet. In addition to the employee's personal data, the HR master data sheet also includes the employee's organizational assignment, workplace and data on the employee's family.

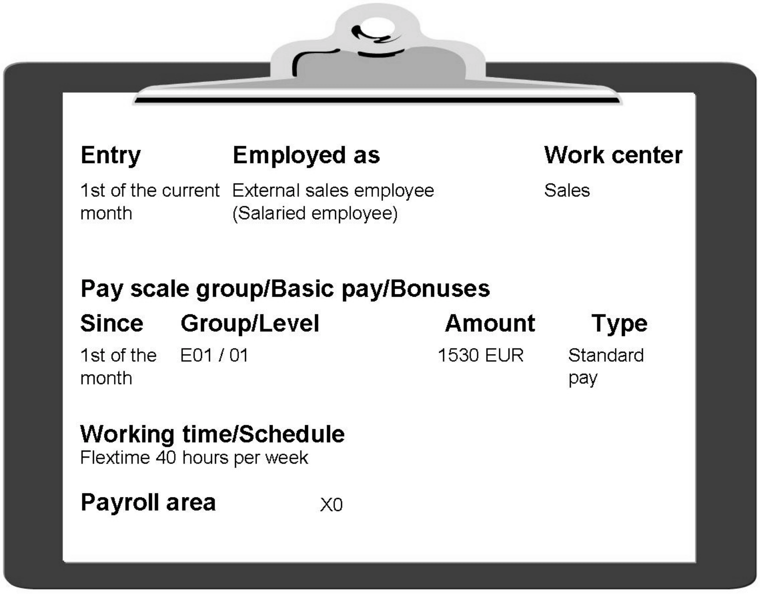

Figure 156: A New Employee's HR Master Data Sheet (2)

Here you can see the employee's working time data and information concerning how and when the employee is paid.

Using a Personnel Action to Hire an Employee

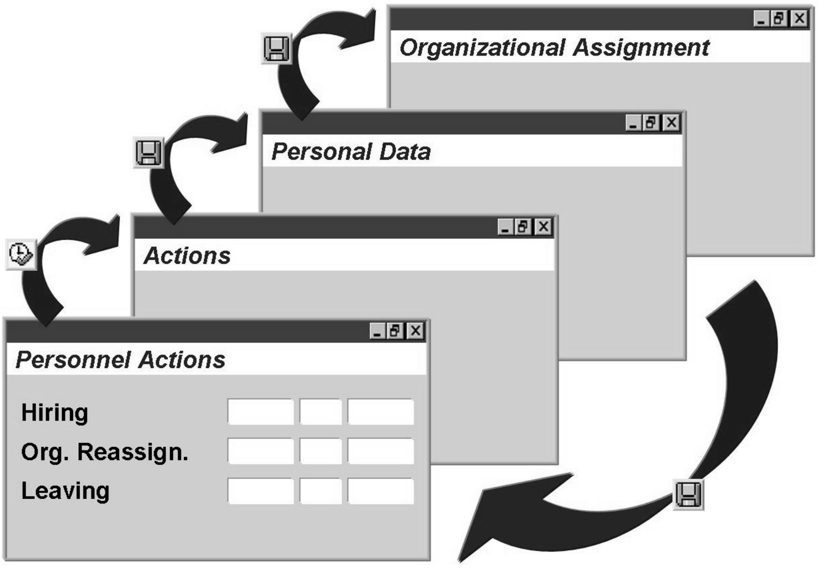

Figure 157: Using a Personnel Action to Hire an Employee

You use a personnel action to transfer the employee's data into the SAP system. To run an action, access the personnel actions through the Personnel Administration menu. Access the Hiring action, and enter the new employee's data. This function automatically takes you through all the infotypes you need to hire an employee. Once you have entered all the relevant data for that particular infotype and saved your entries, the system automatically takes you to the next infotype record. When you complete the hiring action, the system takes you back to the initial personnel action screen.

- **When you are hiring an employee you should create the following entry screens:**

International infotypes

- Actions (Infotype 0000)
- Organizational Assignment (Infotype 0001)
- Personal Data (Infotype 0002)
- Addresses (Infotype 0006)
- Planned Working Time (Infotype 0007)
- Basic Pay (Infotype 0008)
- Bank Details (Infotype 0009)
- ...

Country-specific infotypes

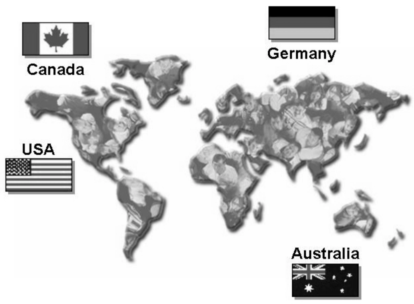

Figure 158: Entry Screens for Hiring

This graphic includes the most important infotypes for a hiring action. On the left are the international entry screens.

In addition to these, there are a number of country-specific infotypes, for example, tax data.

225

Exercise 11: Hiring an Employee

Exercise Duration: 15 Minutes

Exercise Objectives

After completing this exercise, you will be able to:

- Hiring new sales employees at Caliber 'A' Bicycle Company

Business Example

The Caliber 'A' Bicycle Company is famous for its quality products. The demand for its products is so great that you have to hire a new sales representative for Sales Department 1.

Task:

Use the *Hiring HR305* personnel action to hire the new sales employee.

1. On the *Personnel Actions* screen, use the personnel number *305991##* (## = your group number) for your new employee, and enter the first of the month as the start date.

   Select the *Hiring HR305* action type, and hire your employee to work in the *personnel area CABB (Caliber A Bicycle Company)*. Assign the new employee to the employee group *Active (1)*, and to the employee subgroup *Salaried employees (X0)*.

2. On the *Create Actions (infotype 0000)* screen, use the structure search to search for the ## Sales Representative position for the employee. You find this under the following path: *Org. Units HR Training Group → Training International → Sales Total → Sales Department 1*.

   The entries for personnel area *(CABB)*, employee group *(active)* and employee subgroup *(salaried employees)* should correspond to the entries you made on the *Personnel Actions* screen. You fill the fields for personal data at a later point.

   Save the data for this infotype.

3. Check the data proposed on the *Create Organizational Assignment (infotype 0001)* screen, select the entry 0001 (Sales) in the subarea, and save the infotypes.

   Hint: *If the system prompts you to do so, delimit the vacancy for the position to the default date.*

Continued on next page

4. Enter fictional data for all the required fields on the *Create Personal Data (infotype 0002)* screen and save the data.
5. Enter fictional data for all the required fields on the *Create Addresses (infotype 0006)* screen and save the data.
6. Enter fictional data for all the required fields on the *Create Bank Details (infotype 0009)* screen and save the data. If you choose *Bank transfer* (B) as the method of payment, you must also enter the bank details. This is not necessary for payment by *Check* (C). Save the data.
7. Select the work schedule rule NORM on the *Create Planned Working Time (infotype 0007)* screen, choose *Enter*, and save the data.
8. Select the pay scale group *E01* and the level *01* on the *Create Basic Pay (infotype 0008)* screen, choose *Enter*, and save the data.

Solution 11: Hiring an Employee

Task:

Use the *Hiring HR305* personnel action to hire the new sales employee.

1. On the *Personnel Actions* screen, use the personnel number *305991##* (## = your group number) for your new employee, and enter the first of the month as the start date.

   Select the *Hiring HR305* action type, and hire your employee to work in the *personnel area CABB (Caliber A Bicycle Company)*. Assign the new employee to the employee group *Active (1)*, and to the employee subgroup *Salaried employees (X0)*.

   a) *PersAdmin → Personnel Management → Administration → HR Master*

   b) Choose *Personnel Actions*.

   c) Select the Hiring HR305 personnel action.

   d) Before you execute the *Hiring HR305* personnel action, make the following entries on the *Personnel Actions* screen:

   e) Personnel number: 305991##

   f) Start date: First of this month

   g) Select the Hiring HR305 personnel action.

   h) Personnel Area CABB

   i) Employee group: 1 (active), Employee subgroup: Salaried employee (X0)

   j) Choose *Execute*.

2. On the *Create Actions (infotype 0000)* screen, use the structure search to search for the ## Sales Representative position for the employee. You find this under the following path: *Org. Units HR Training Group → Training International → Sales Total → Sales Department 1*.

   The entries for personnel area *(CABB)*, employee group *(active)* and employee subgroup *(salaried employees)* should correspond to the entries you made on the *Personnel Actions* screen. You fill the fields for personal data at a later point.

   Save the data for this infotype.

   a) Use the *Structure Search* to find the ## *Sales Executive* position in the *Org. Units HR Training Group* in the *Sales Department 1* organizational unit.

Continued on next page

3. Check the data proposed on the *Create Organizational Assignment (infotype 0001)* screen, select the entry 0001 (Sales) in the subarea, and save the infotypes.

   Hint: *If the system prompts you to do so, delimit the vacancy for the position to the default date.*

   a) Check the data proposed on the *Create Organizational Assignment (infotype 0001)* screen and save the infotypes.

      Hint: *If the system prompts you to do so, delimit the vacancy for the position to the default date.*

4. Enter fictional data for all the required fields on the *Create Personal Data (infotype 0002)* screen and save the data.

   a) Enter fictional data for all the required fields on the *Create Personal Data (infotype 0002)* screen and save the data.

      Hint: *If you enter data on partners or children, a dynamic action may require you to enter additional data in the system. If this is the case, select the corresponding entries and continue with the Hiring action.*

5. Enter fictional data for all the required fields on the *Create Addresses (infotype 0006)* screen and save the data.

   a) Enter fictional data for all the required fields on the *Create Addresses (infotype 0006)* screen and save the data.

6. Enter fictional data for all the required fields on the *Create Bank Details (infotype 0009)* screen and save the data. If you choose *Bank transfer* (B) as the method of payment, you must also enter the bank details. This is not necessary for payment by *Check* (C). Save the data.

   a) Enter fictional data for all the required fields on the *Create Bank Details (infotype 0009)* screen and save the data. If you choose *Bank transfer* (B) as the method of payment, you must also enter the bank details. This is not necessary for payment by *Check* (C). Save the data.

7. Select the work schedule rule NORM on the *Create Planned Working Time (infotype 0007)* screen, choose *Enter*, and save the data.

   a) Work schedule rule NORM

Continued on next page

8. Select the pay scale group *E01* and the level *01* on the *Create Basic Pay (infotype 0008)* screen, choose *Enter*, and save the data.

   a) Pay scale group E01, level 01

   b) Save the data.

Lesson Summary

You should now be able to:

- Discuss the special features of Human Resources in your company and describe the enterprise structure
- Hire a new employee

Unit Summary

You should now be able to:

- Discuss the special features of Human Resources in your company and describe the enterprise structure
- Hire a new employee

Unit 8

233

Managing and Editing Projects

Further information can be found in the Instructor Guide in SAPNet.

Unit Overview

This unit deals with the system configuration options provided by SAP. One of the main focuses is creating and using a project IMG.

Unit Objectives

After completing this unit, you will be able to:

- Understand the different forms of the Implementation Guide and its advantages
- Create a new Project IMG
- Carry out evaluations in the IMG
- Maintain IMG entries
- Explain effects of changes in the IMG table on the application

Unit Contents

Lesson: General and Project Management

234

Lesson Duration: 30 Minutes

Lesson Overview

Options are displayed in this lesson using the IMG system settings.

Lesson Objectives

After completing this lesson, you will be able to:

- Understand the different forms of the Implementation Guide and its advantages
- Create a new Project IMG

Further information can be found in the Instructor Guide in SAPNet.

Business Example

Your company has bought a manufacturing company.

You must now map the new company structure and all the changes for the Human Resources area in the system.

SAP provides the tool that will help you map the new company requirements when working through the project steps: a project IMG.

The New Situation in Your Company

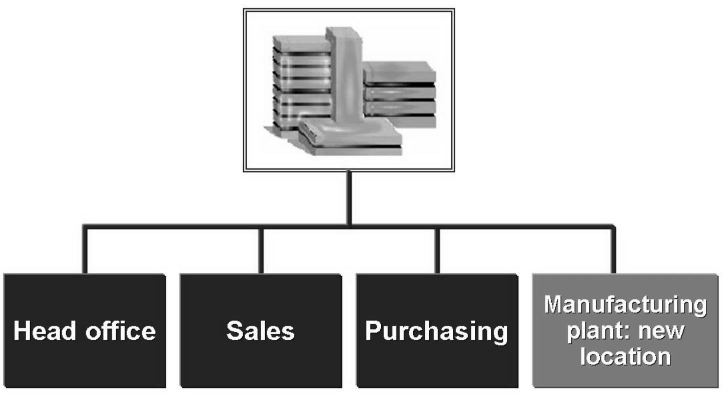

Figure 159: The New Structure in Your Company

In the last few years, your company has effectively managed its resources. The management has decided to branch into manufacturing bikes, in addition to just selling them. The company has therefore bought a manufacturing plant in a new location.

The company must now implement the SAP system at the manufacturing plant. To do this, you must customize the existing system.

1 Managing Director
3 Sales directors, one per location
19 External sales persons
5 Internal sales persons
5 Purchasers
10 Administrative assistants, 5 full-time, 5 part-time (50%)
1 Full-time administrator in the Accounting Department
1 Full-time administrator in the HR Department
1 Part-time administrator in both the Accounts and HR Departments (both 50% part-time)
4 System administrators with rotating shifts
1 Gardener for tending the grounds
1 Janitor
4 Security personnel working rotating shifts

Workers at the new production plant

1 Managing Director
1 Production manager
1 Warehouse manager
5 Warehouse workers (hourly wage)
5 Fitters/packers
19 Production workers (hourly wage)
1 Controller for work scheduling
1 Work scheduler
5 Lathe operators (hourly wage)
5 Welders (hourly wage)
5 Locksmiths (hourly wage)

Figure 160: New Employee List

The graphic lists your company's employees.

There are several employees employed at the manufacturing plant that you must add to the SAP system.

You must make a number of changes to the existing system.

Project Steps Needed to Map the New Enterprise Structure in the SAP System

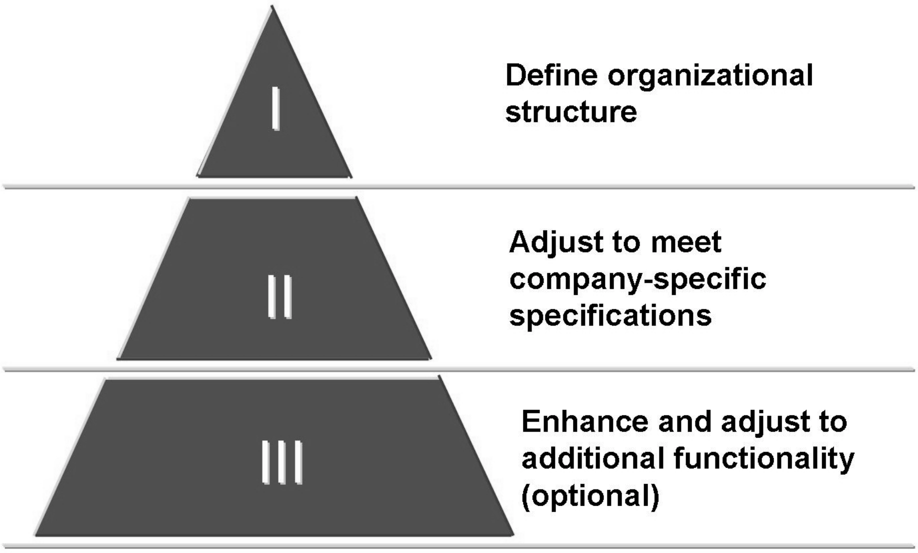

Figure 161: Project Steps Needed to Map the New Enterprise Structure in the SAP System

The SAP project team will make the changes to the SAP system to meet the requirements of the new manufacturing plan. You are a member of the project team customizing the system to meet the Human Resources requirements.

Together with the project team members from other applications, you must first define the new enterprise structure. Then you must make these changes in the system so that it meets the manufacturing plant's Human Resources requirements. This system configuration is known as **Customizing**. The members of the project team make settings in the system to adjust the system to meet the company's requirements of a productive system.

You may also have to to implement additional functions using program modifications.

SAP Tools – The Implementation Guide (IMG)

Figure 162: Tool - The Implementation Guide

To make sure that you carry out all the project steps required, SAP provides you with a tool - the Implementation Guide - to help you with the implementation and customizing.

You can use the Implementation Guide to store your customer-specific requirements in the system (Customizing).

Customizing is a method that supports the following situations:

- Implementing the mySAP ERP 2005 system
- Enhancing the mySAP ERP 2005 system
- With a Release Upgrade

The Difference Between Managing and Executing Projects

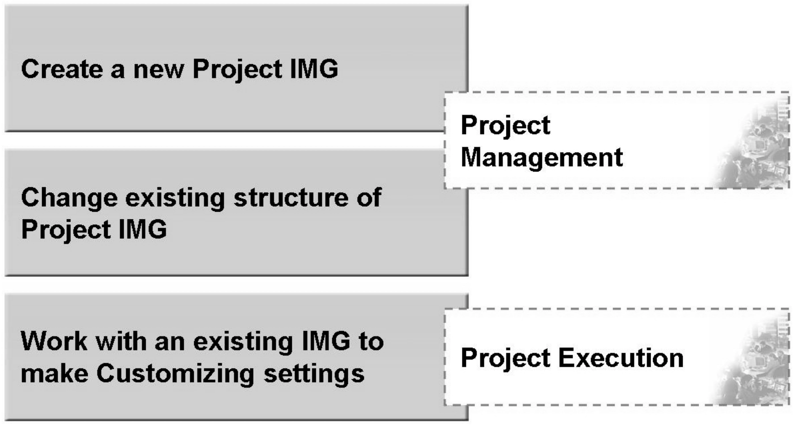

Figure 163: The Difference Between Managing and Executing Projects

You create new projects in project management. Here, you also change the structure of existing Project IMGs (scope, planning data of project, and so on).

If you want to use an existing Project IMG or the SAP Reference IMG to make Customizing settings, you use project execution.

IMG Forms

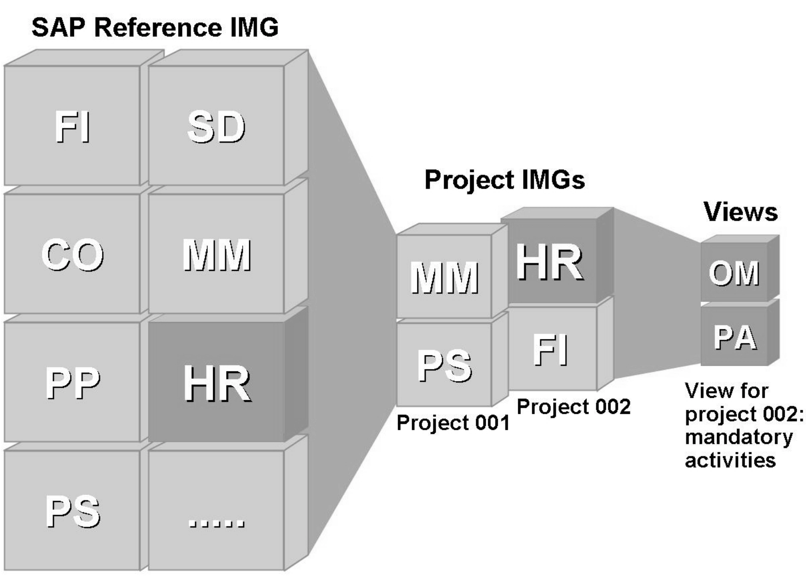

Figure 164: IMG Forms

In your delivery system, you will find an **SAP Reference IMG**. This IMG contains all the customizing settings for all mySAP ERP 2005 components for all countries.

You create the **Project IMG** by selecting countries and application components based on the SAP Reference IMG. You can use the project IMG to process Customizing steps, project documentation, and project information.

To make the project IMG even easier to use, you can create **project views**. You can also use project views to process Customizing steps, project documentation, and project information. You can use the attributes mandatory/optional/critical/non-critical as a basis for the views, or you can define your own views. By using views you can reduce the number of Customizing steps.

241 Exercise 12: General and Project Management (Optional)

Exercise Duration: 15 Minutes

Exercise Objectives

After completing this exercise, you will be able to:

- Create a Project IMG

Business Example

Your company has recently purchased several manufacturing plants. These new plants will have an effect on Human Resources, and must be mapped in the system. Your task is to create a tool to enter and document system settings. This tool is the Project IMG.

Task:

Enter Project Managment to create a project IMG. Give your project IMG the project name HR305_GR## (## = your group number).

1. Create a name (description) for your project. Include your group number in the description.
2. Enter your name as the project manager (under Person Responsible).
3. Enter today's date as the start date and the date in four weeks time as the end date of the project.
4. On the tab pages, you must assign the following data:

   Assign project members:

   Enter your user ID, select six other users from the course, and enter them into the list.

   Assign status values: *In process, completed, quality check done, review planned, and not relevant.*

   Assign key words: HR - Human Resources
5. On the *Documentation Types* tab page, choose documentation type *Y1 Logs, Decisions*.
6. On the *Cross-Ref.* tab page, switch off the where-used list.
7. On the *Project Views* tab page, enter details on a view for your project IMG, which should contain both critical and non-critical mandatory activities. Choose Save, without generating the view.

Continued on next page

8. On the *Scope* tab page, choose *Specify project scope by choosing application components and countries.*

   Select the country according to the country in which the course is being held.

   Select the following HCM components in the application components:

   - In the Personnel Management node:
     - *Personnel Administration (for your country)*
     - *Personnel Administration for General Parts*
   - The complete Organizational Structure node
   - In the Time Management node:
     - *Work schedule*
     - *Time Data Recording and Administration*
   - In the Payroll node:
     - *Payroll for your country*

9. Save your data, and choose *Generate Project IMG*.

   Do not generate the IMG in the background, and confirm that you wish to generate the view.

Solution 12: General and Project Management (Optional)

Task:

Enter Project Managment to create a project IMG. Give your project IMG the project name HR305_GR## (## = your group number).

1. Create a name (description) for your project. Include your group number in the description.
   a) *Tools* → *Customizing* → *IMG*. Select the *Project management* button.
   b) Choose *Create Project*, and enter HR305_GR## as the project name.
2. Enter your name as the project manager (under Person Responsible).
   a) ...
3. Enter today's date as the start date and the date in four weeks time as the end date of the project.
   a) ...
4. On the tab pages, you must assign the following data:

   Assign project members:

   Enter your user ID, select six other users from the course, and enter them into the list.

   Assign status values: *In process, completed, quality check done, review planned, and not relevant.*

   Assign key words: HR - Human Resources
   a) Enter your user *HR305-##*.
   b) Assign other project members.
   c) Assign status values: 01 – *In process*, 02 – *completed*, 03 – *quality check done*, 04 – *review planned*, 05 – *not relevant.*
   d) Assign key words: HR - Human Resources
5. On the *Documentation Types* tab page, choose documentation type *Y1 Logs, Decisions*.
   a) ...
6. On the *Cross-Ref.* tab page, switch off the where-used list.
   a) Select *Switch off where-used list*.

Continued on next page

7. On the *Project Views* tab page, enter details on a view for your project IMG, which should contain both critical and non-critical mandatory activities. Choose Save, without generating the view.

   a) Choose the *Project Views* tab page. Now choose *Create project view.* Enter a name for your view, and choose *Activity necessity*. Choose *Continue*.

   b) Under *Activity necessity*, select critical and non-critical mandatory activities, and then choose *Save*, but do not *generate* the view at this point.

8. On the *Scope* tab page, choose *Specify project scope by choosing application components and countries.*

   Select the country according to the country in which the course is being held.

   Select the following HCM components in the application components:

   - In the Personnel Management node:
     - *Personnel Administration (for your country)*
     - *Personnel Administration for General Parts*
   - The complete Organizational Structure node
   - In the Time Management node:
     - *Work schedule*
     - *Time Data Recording and Administration*
   - In the Payroll node:
     - *Payroll for your country*

   a) Choose *Select countries to include in project scope*, and select your country.

   b) Choose *Change selection* and under Personnel Management, select the following components: *Personnel Administration (for your country)*, and *Organizational Structure*. Under Time Management, select the components *Work schedule* and *Time Data Recording and Administration*, and under Payroll, select *Payroll for your country*.

9. Save your data, and choose *Generate Project IMG*.

   Do not generate the IMG in the background, and confirm that you wish to generate the view.

   a) Choose Save, and then Generate Project IMG. In the subsequent dialog box, deselect the Generate in background indicator, but leave the Generate project views indicator selected. Choose Continue, and wait until your project IMG has been generated.

Lesson Summary

You should now be able to:

- Understand the different forms of the Implementation Guide and its advantages
- Create a new Project IMG

Lesson: Project Execution and Evaluation

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Lesson Duration: 50 Minutes

Lesson Overview

IMG attributes and evaluations

Maintaining IMG tables and effects on application

Lesson Objectives

After completing this lesson, you will be able to:

- Carry out evaluations in the IMG
- Maintain IMG entries
- Explain effects of changes in the IMG table on the application

Further information can be found in the Instructor Guide in SAPNet.

Business Example

You should perform different evaluations in your company using individual call ups in the IMG.

You should become acquainted with table maintenance in the IMG and understand the effects in the application.

IMG: Functions

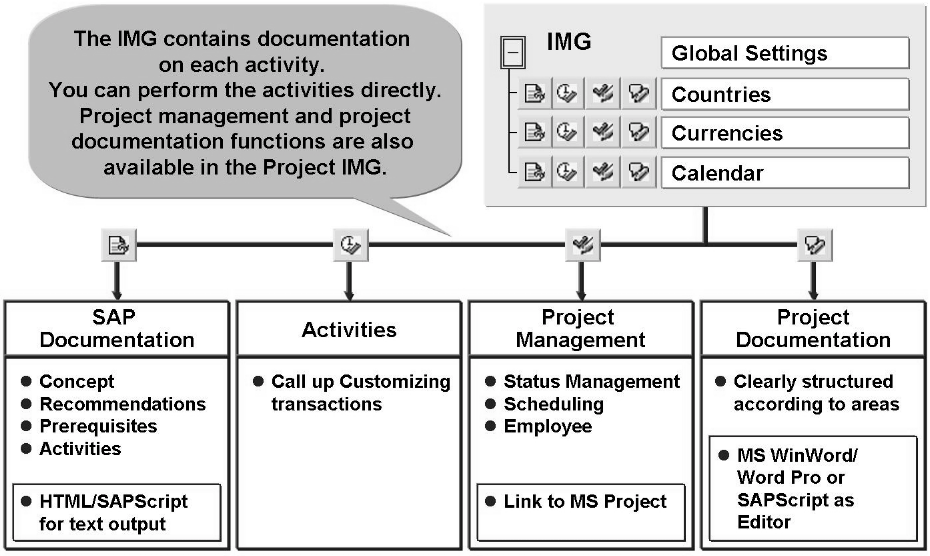

Figure 165: IMG: Functions

The Implementation Guide enables you to set up the system. You can use the Implementation Guide to implement all mySAP ERP 2005 application components.

SAP has divided the Implementation Guide into application areas. The Implementation Guide lists the activities in the order that you are to execute them within these application areas.

SAP created the Implementation Guide using a hierarchical structure. On the lowest level, you can perform the following functions using icons:

- **Calling Up SAP Documentation**

  You can find the information you need to help you customize the system settings.

- **Calling up the Customizing transaction**

  using a selection of icons for the system settings

- **Calling Up Project Management (only in project IMG)**

  You can call up project management for every customizing step. You can enter the status, tasks, degree of processing, and resources.

- **Calling Up Project Documentation (only in project IMG)**

  You can enter your project documentation for each customizing step. You can store your documentation either as project-specific or project-independent documentation.

Evaluations in IMG

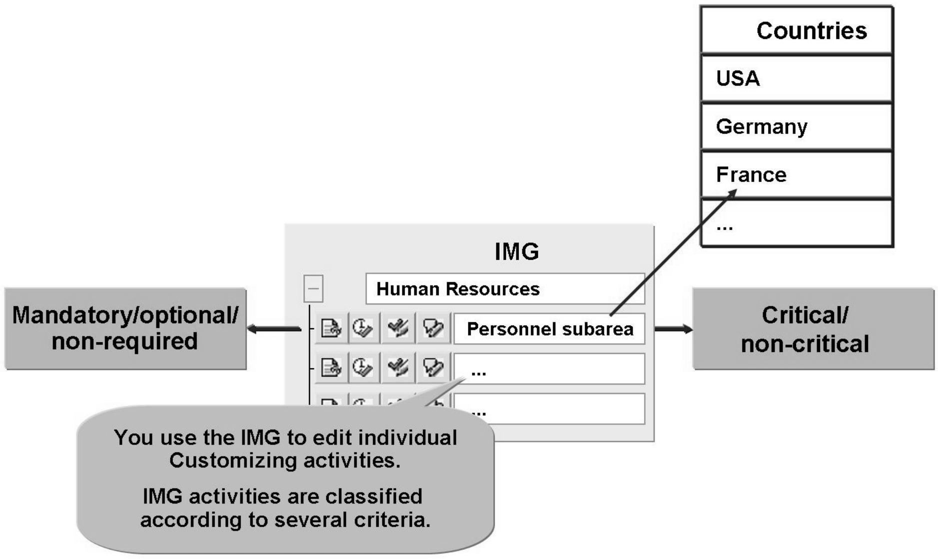

Figure 166: IMG: Attributes

SAP gives each customizing step specific attributes. Attributes are grouped as follows:

- Mandatory Activities

  These are activities for which SAP cannot deliver complete default settings (for example, enterprise structure). You must store your customer-specific requirements for activities classified as mandatory.

- Optional Activities

  SAP delivers default settings for these activities. You can use these settings if they meet your requirements.

- Non-Required Activities

  SAP delivers complete default settings for these activities. Only in exceptional cases do you need to adapt these settings (for example, if you need country-specific settings).

In addition, Customizing steps have the following attributes:

- Critical Activities

  You must proceed with great care when performing critical activities as any errors made here can have far-reaching consequences.

- Non-Critical Activities

  You must also proceed with care when you carry out these activities, but the consequences of any errors are less far-reaching.

You can also determine for each Customizing step the countries for which the activity is necessary.

Links Between Master Data and Customizing Tables

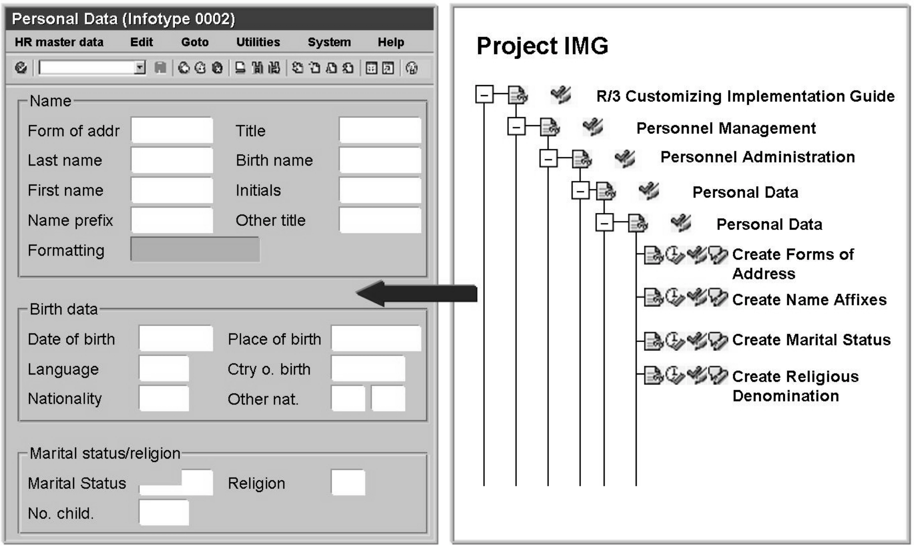

Figure 167: Links Between Master Data and Customizing Tables

You store employee data in infotypes. All the entries that require specific texts come from tables that you can set up when you customize the system. The possible entries (F4) are a section of the IMG and enable you to see what data the system stores in the corresponding table.

You need to enter data in the Customizing tables to be able to use your company's data (for example, enterprise structure or new pay scale groups) in master data.

Maintenance in Customizing Tables

Customizing Tables: Key and Function Fields

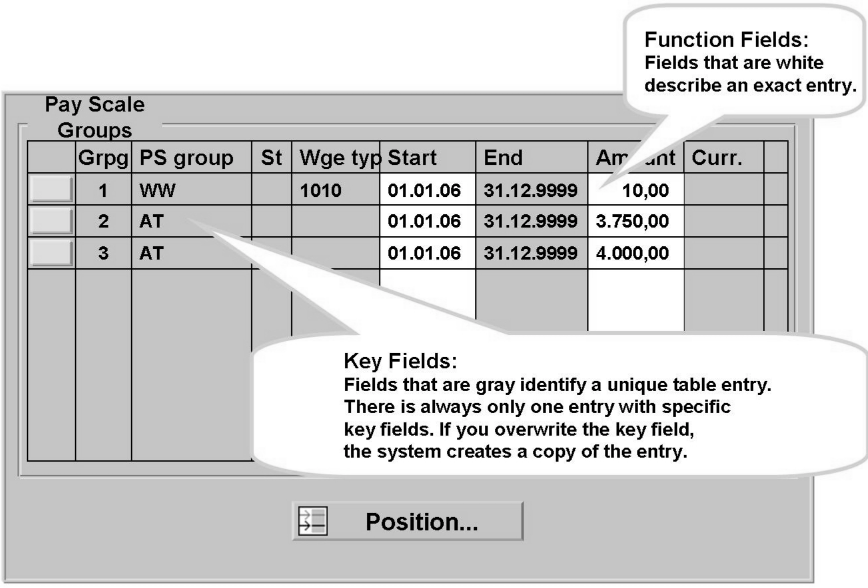

Figure 168: Customizing Tables: Key and Function Fields

An entry in a Customizing table is made up of key fields and function fields.

Key fields identify a specific unique entry, whereas function fields describe this entry.

There is always only one table entry with the same key fields.

Customizing Tables: Create - Copy

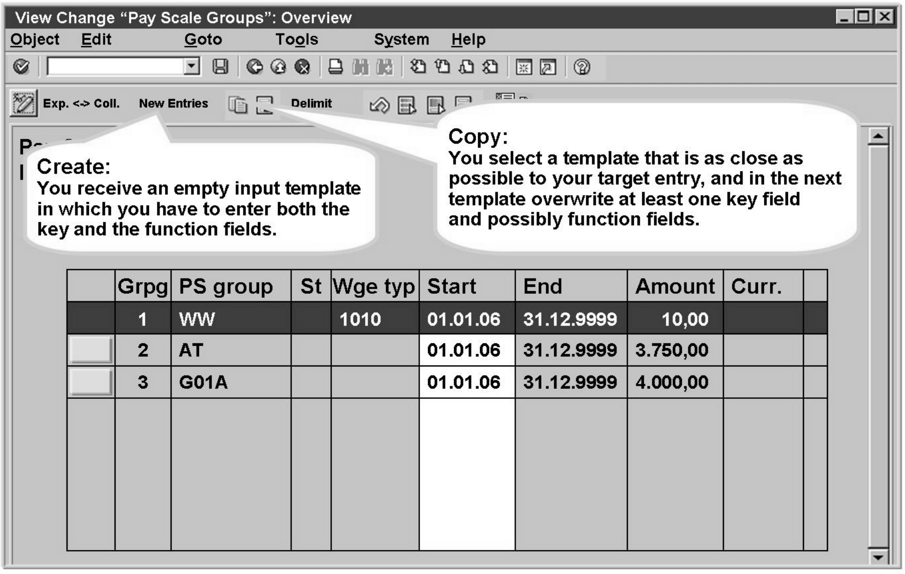

Figure 169: Customizing Tables: Create - Copy

You can use two methods to make entries in Customizing tables:

- New entries:

  You receive an empty input template in which you have to enter both the key and the function fields.

- Copy:

  Select an entry that you want to copy and overwrite the entries in the key and, if necessary, the function fields on the subsequent screen.

Customizing Tables: Deleting Entries

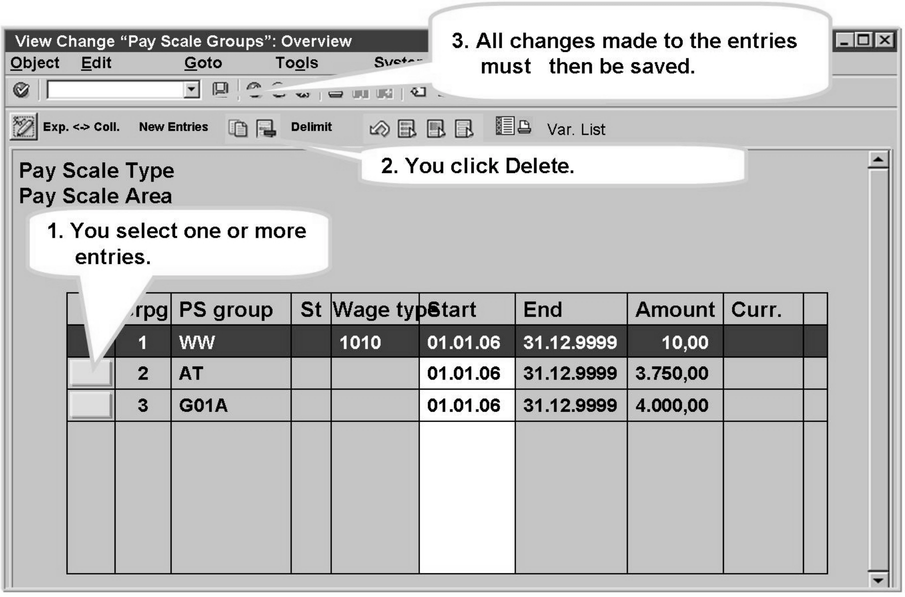

Figure 170: Customizing Tables: Delete - Save

To delete entries in Customizing tables, select the entries that you want to delete and then choose Delete.

You must save all the changes you make to Customizing tables.

Customizing Tables: Delimit

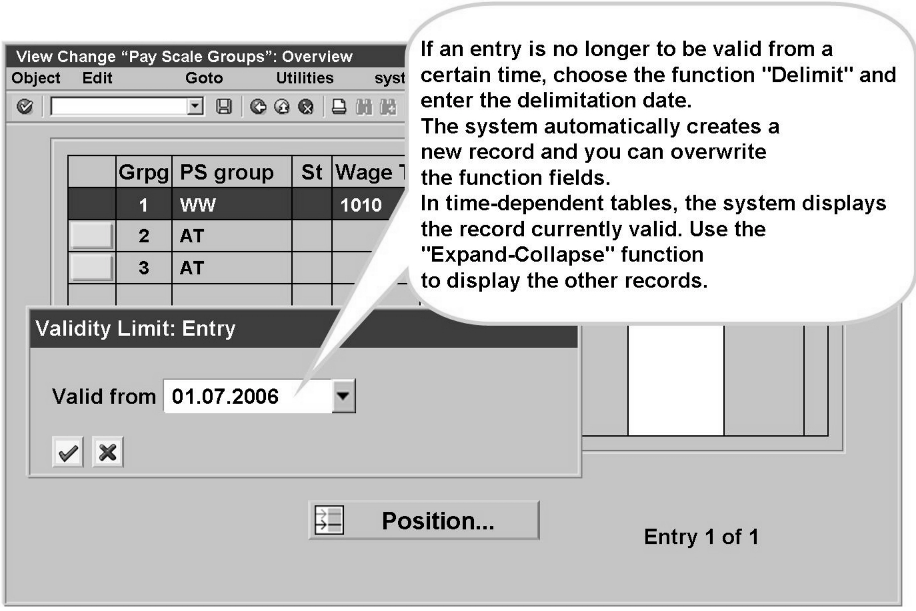

Figure 171: Customizing Tables: Delimit

If an entry is no longer valid as of a certain date, choose “Delimit” and enter the delimitation date. The system automatically creates a new record and you can overwrite the function fields. The old table entry is kept for the history.

In time-dependent tables, the system displays the record currently valid. Use the “Expand-Collapse” function to display the other records.

Customizing Settings from the Application

Customizing Settings from the Application (1)

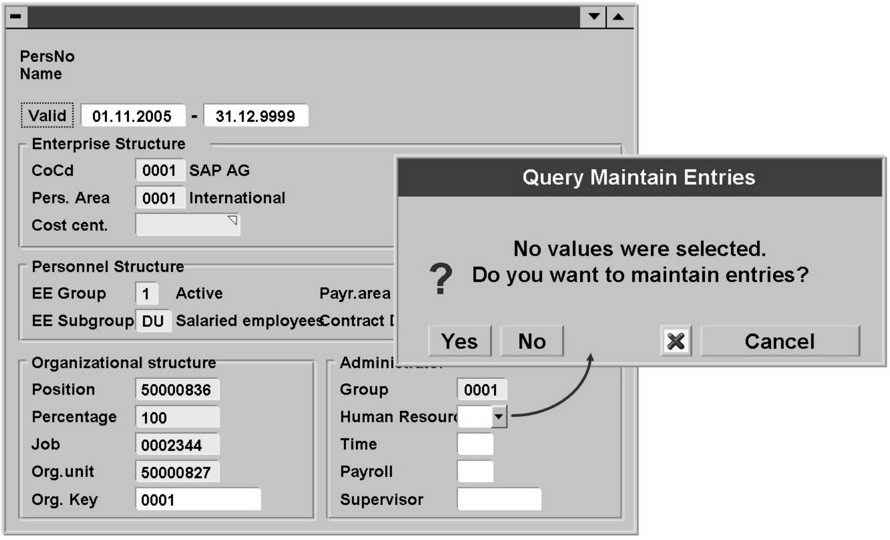

Figure 172: Customizing Settings from the Application (1)

If there are no entries for a field in master data, the appropriate dialog box appears. You can then go directly to the relevant IMG step from this dialog box. You can then maintain the necessary entries.

This functionality is not active in the production system.

Customizing Settings from the Application (2)

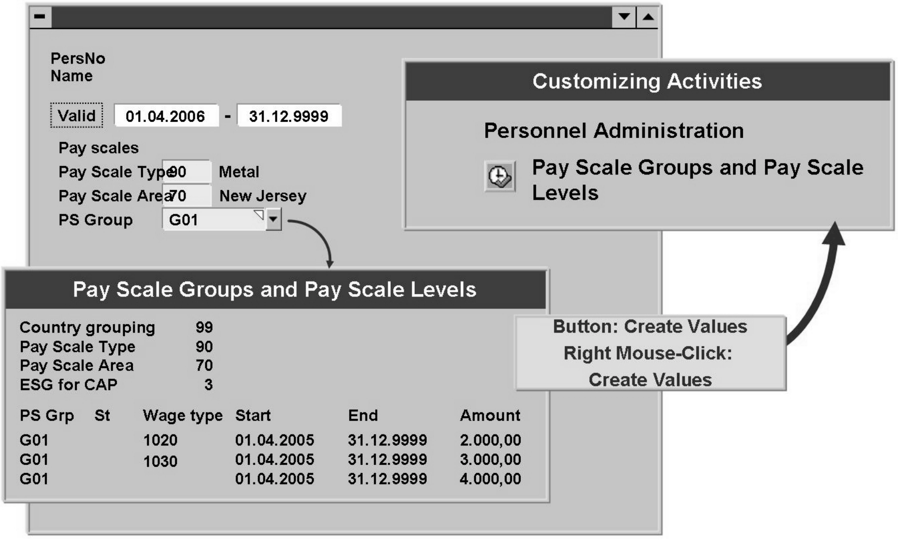

Figure 173: Customizing Settings from the Application (2)

By choosing the *Create Values* function, or by choosing *Create Values* from the right mouse-click menu, you can jump from master data to the correct position in the IMG, and maintain the entries accordingly. You can also specify whether you require Customizing activities from a specific Project IMG, or from the SAP Reference IMG.

This functionality is not active in the production system.

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Exercise 13: Project Execution and Evaluation

Exercise Duration: 15 Minutes

Exercise Objectives

After completing this exercise, you will be able to:

- Working with a Project IMG

Business Example

Your company has recently purchased several manufacturing plants. These new plants will have an effect on Human Capital Management, and must be mapped in the system. Use a project IMG to create system settings. You now wish to familiarize yourself with the implementation of a project IMG.

Task 1:

1. Enter the Execute Project mode.

   First, you must enter the Project IMG **HR305** in your worklist for you to be able to work with it. Define this project IMG as a standard project.

Task 2:

1. In the user-specific settings, adjust the display of the project IMG to meet your own requirements (we recommend not using a split screen).

Task 3:

Enter your own project IMG, and expand some nodes. Now answer the following questions:

1. On each of the lowest levels, you will find the individual IMG steps with four different icons. Now answer the following questions:

   Which icon displays information on what this IMG step does?

   ____

   Where can you record information on the status of a step, the level of processing, and planned start and end times?

   ____

Continued on next page

For a particular step, you want to log who did what, where, and why. Where can you record this information?

___

You now want to edit a table entry. Which icon enables you to edit table entries?

___

2. Use the *Find...* function to search for the *Create Marial Status* IMG step. Alternatively, use the menu option *Edit - Find*. What is the name of the table that you need to edit for this IMG step?
3. Assign the status *Completed* to any activity, and display this status in the structure of the project IMG.
4. In the IMG, display all of the different categories for the importance of the activities. Name these categories.

___

___

___

5. Check the critical activities in the IMG. What are the two categories called?

___

___

6. Make the system display all IMG activities that have the status *completed*.

Task 4:

Creating Entries in Customizing Tables

1. In Execute Project, navigate to the *Personal Data* node.

   From there, call the IMG activity *Create name affixes*.

   Create the following two entries, once by choosing *New Entries* and once by choosing *Copy*:

Affix type (AT):	T (academic title before name, such as Dr.)
Name Affix:	A## and B##
Output text:	## + a text of your choice

   What is the essential difference between the copy function and the create new entries function?

___

Continued on next page

____

Save your entries.

2. Go into the Maintain HR Master Data transaction for the employee you hired (personnel number 305991##) and call the *Personal Data* infotype in change mode.

   In the *Title* field, open the selection list using the F4 help. Among others, you can see the entry you just created.

   Exit the infotype without saving it.

Task 5:

Deleting Entries

1. Go back into Execute Project, and navigate to the *Personal Data* node. From there, call the IMG activity *Create name affixes* again.

   What steps do you have to perform to delete both your entries again?

   ____

   ____

   ____

   Delete both your entries. Do not change the other entries.

2. Call the Personal Data infotype in change mode again for your employee (personnel number 305991##) and open the value help for the Title field.

   The two entries you deleted are no longer displayed.

Task 6:

The following exercises are optional.

Delimiting Entries

1. In the IMG, navigate to the *Basic Pay* node and start the IMG activity *Revise Pay Scale Groups and Levels*. This calls the pay scale table T510.

   Enter the following values in the dialog box that appears:

Country grouping:	99
PS type:	90
Pay scale area:	50

   Now create another entry with the following values:

Continued on next page

Grouping:	2
Pay scale group:	GR##
Pay scale level:	01
Wage type:	
Start date:	01.01.2002
End date:	31.12.9999
Amount:	any
Currency:	EUR

2. During collective agreement negotiations, a decision was made to increase the value of the entry you have just created by 5%. Why can you not simply overwrite the old value using the change function?

   ____

   ____

   Delimit the relevant entry.

   Display the history.

Solution 13: Project Execution and Evaluation

Task 1:

1. Enter the Execute Project mode.

   First, you must enter the Project IMG **HR305** in your worklist for you to be able to work with it. Define this project IMG as a standard project.

   a) *SAP EASY ACCESS MENU:Tools → Customizing → IMG → Execute Project*

   b) Choose *Add to worklist*. Select the HR305 project IMG and choose *Copy*.

   c) Select the HR305 project IMG and in the *Edit* menu, choose *Default project or view → Define.*

Task 2:

1. In the user-specific settings, adjust the display of the project IMG to meet your own requirements (we recommend not using a split screen).

   a) In the *Settings → User-specific* menu, make sure that the *Split screen* indicator is not set in the *General* tab page. Choose *Continue*.

Task 3:

Enter your own project IMG, and expand some nodes. Now answer the following questions:

1. On each of the lowest levels, you will find the individual IMG steps with four different icons. Now answer the following questions:

   Which icon displays information on what this IMG step does?

   ____

   Where can you record information on the status of a step, the level of processing, and planned start and end times?

   ____

   For a particular step, you want to log who did what, where, and why. Where can you record this information?

   ____

Continued on next page

You now want to edit a table entry. Which icon enables you to edit table entries?

____

a) In your Customizing worklist, select your HR305 project, and choose *Display project* in the bottom left of the screen.

b) First icon: *If you choose this icon, you branch into the SAP documentation for this activity*.

c) *If you double-click the name of a step, you also branch into the SAP documentation.*

d) Third icon: *If you choose this icon, you branch into status maintenance*

e) Fourth icon: *If you choose this icon, you branch into note maintenance or the status information*

f) Second icon: *Node has an executable function. If you choose this icon, you run the IMG activity.*

2. Use the *Find...* function to search for the *Create Marial Status* IMG step. Alternatively, use the menu option *Edit - Find*. What is the name of the table that you need to edit for this IMG step?

   a) Choose *Find...*, or use the menu option *Edit - Find*. Enter the name of the Customizing activity, and choose *Continue*. If more than one activity exists, the system displays a hitlist. If only one activity is found, the system jumps directly to the activity in the list.

   b) Choose the executable function. In other words, choose the second icon alongside the *Define Countries* activity.

   c) Position the cursor on a table entry.

   d) Choose *Help* (or F1).

   e) When the Performance Assistant appears, choose *Technical information*.

   f) In the Field data screen section, you will find the name of the table, or the views for table *V_T502T* under Generated views.

Continued on next page

3. Assign the status *Completed* to any activity, and display this status in the structure of the project IMG.

   a) To edit the status, choose the icon for status maintenance, and assign status *03 - Completed* to the selected activity.

   b) *Save* your entries, and choose *Back*. You return to the project IMG.

   c) To display the status in the structure of the project IMG, choose

   d) *View → Additional information → Status*

4. In the IMG, display all of the different categories for the importance of the activities. Name these categories.

   ____

   ____

   ____

   a) *Additional information Activity importance*

   Categories: *Optional activity*
   Mandatory activity
   Non-required activity

5. Check the critical activities in the IMG. What are the two categories called?

   ____

   ____

   a) *Additional information → Critical activity*

   Categories: *Critical*
   Non-critical

6. Make the system display all IMG activities that have the status *completed*.

   a) *SAP Easy Access menu:Tools → Customizing → IMG → Project Analysis*

   b) Select Completed in the Status field

   c) Choose Execute

Continued on next page

Task 4:

Creating Entries in Customizing Tables

1. In Execute Project, navigate to the *Personal Data* node.

   From there, call the IMG activity *Create name affixes*.

   Create the following two entries, once by choosing *New Entries* and once by choosing *Copy*:

Affix type (AT):	T (academic title before name, such as Dr.)
Name Affix:	A## and B##
Output text:	## + a text of your choice

   What is the essential difference between the copy function and the create new entries function?

   ____

   ____

   Save your entries.

   a) *SAP Easy Access menu:Tools → Customizing → IMG → Project Analysis*

   b) *In the IMG: Personnel Management → Personnel Administration → Personal Data → Personal Data → Create Marital Status*

   c) *Create: You have to enter all new entries*

   d) *Copy: You only need to change the entries in the copy template that are suitable*

2. Go into the Maintain HR Master Data transaction for the employee you hired (personnel number 305991##) and call the *Personal Data* infotype in change mode.

   In the *Title* field, open the selection list using the F4 help. Among others, you can see the entry you just created.

   Exit the infotype without saving it.

   a) *SAP Easy Access menu:Human Resources → Personnel Management → Administration → HR Master Data → Maintain*

   b) *Personnel number:* 305991##

   c) Select the *Personal Data* infotype and choose *Change*.

   d) Choose *Back* and *confirm the dialog box with Yes*.

Continued on next page

Task 5:

Deleting Entries

1. Go back into Execute Project, and navigate to the *Personal Data* node. From there, call the IMG activity *Create name affixes* again.

   What steps do you have to perform to delete both your entries again?

   ____

   ____

   ____

   Delete both your entries. Do not change the other entries.

   a) *Select entries*

   b) *Choose Delete*

   c) *Choose Save*

2. Call the Personal Data infotype in change mode again for your employee (personnel number 305991##) and open the value help for the Title field.

   The two entries you deleted are no longer displayed.

   a) *SAP Easy Access menu:Human Resources → Personnel Management → Administration → HR Master Data → Maintain*

   b) *Personnel number:* 305991##

   c) Select the *Personal Data* infotype and choose *Change*.

Task 6:

The following exercises are optional.

Delimiting Entries

1. In the IMG, navigate to the *Basic Pay* node and start the IMG activity *Revise Pay Scale Groups and Levels*. This calls the pay scale table T510.

   Enter the following values in the dialog box that appears:

Country grouping:	99
PS type:	90
Pay scale area:	50

   Now create another entry with the following values:

Continued on next page

Grouping:	2
Pay scale group:	GR##
Pay scale level:	01
Wage type:	
Start date:	01.01.2002
End date:	31.12.9999
Amount:	any
Currency:	EUR

a) *IMG: Personnel Management → Personnal Administration → Payroll Data → Basic Pay → Revise Pay Scale Groups and Levels*

b) *Choose New Entries or Copy As and then Copy.*

2. During collective agreement negotiations, a decision was made to increase the value of the entry you have just created by 5%. Why can you not simply overwrite the old value using the change function?

____

____

Delimit the relevant entry.

Display the history.

a) *If you overwrite the old value, you also overwrite the history.*

b) *Historical data can be important, for example, for retroactive accounting.*

c) Select the entry and choose Delimit

d) Use today's date

e) Enter new amount

f) Choose Enter, Save and then Back

g) *Select entry and choose Expand <-> Collapse.*

Lesson Summary

You should now be able to:

- Carry out evaluations in the IMG
- Maintain IMG entries
- Explain effects of changes in the IMG table on the application

Unit Summary

You should now be able to:

- Understand the different forms of the Implementation Guide and its advantages
- Create a new Project IMG
- Carry out evaluations in the IMG
- Maintain IMG entries
- Explain effects of changes in the IMG table on the application

Unit 9

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Enterprise Structure

Further information can be found in the Instructor Guide in SAPNet.

Unit Overview

The company and personnel structure is modified in this unit. The entity copier is thereby illustrated.

Unit Objectives

After completing this unit, you will be able to:

- Describe the meaning and elements of the enterprise structure
- Modify the enterprise structure using the entity copier
- Describe the meaning and elements of the personnel structure
- Understand the modification of the personnel structure using the entity copier
- Check the assignments

Unit Contents

Lesson: Enterprise Structure

270

Lesson Duration: 60 Minutes

Lesson Overview

The elements of Enterprise Structure are described in this lesson.

The Enterprise Structure is modified using the entity copier.

Lesson Objectives

After completing this lesson, you will be able to:

- Describe the meaning and elements of the enterprise structure
- Modify the enterprise structure using the entity copier

Further information can be found in the Instructor Guide in SAPNet.

Business Example

Since a new manufacturing plant was bought, it is necessary to map the new enterprise structure in the SAP system.

Overview - Enterprise Structure

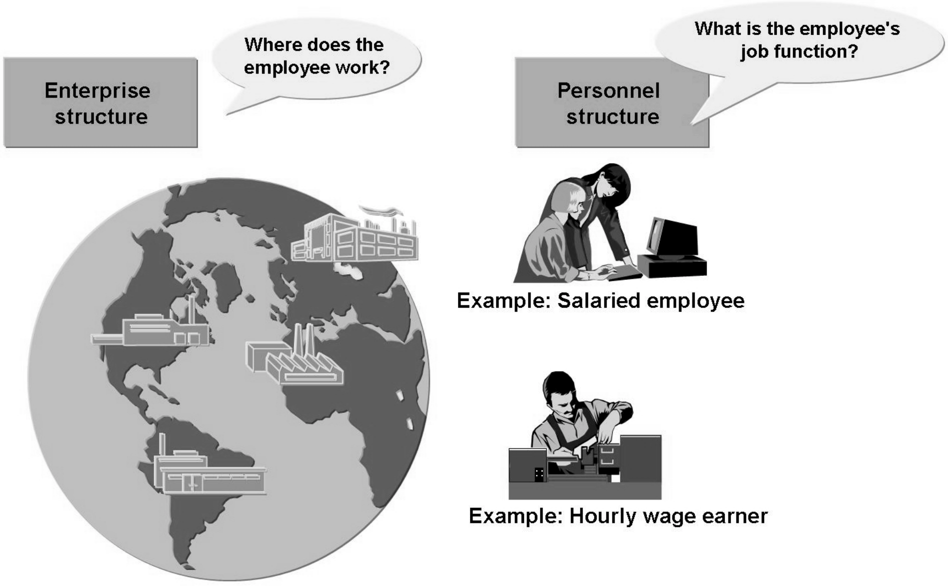


Figure 174: Overview - Enterprise Structure

Every employee has an organizational assignment, that is, he or she is unique in the enterprise structure and in the personnel structure. In other words, the employee belongs to a specific place of work and has a specific status (for example, salaried employee or industrial worker).

You assign an employee to the enterprise structure in master data by means of the “Organizational Assignment” infotype (0001).

In the SAP system, the company's structure consists of the enterprise structure and the personnel structure.

You set up the enterprise and personnel structure using the Customizing functions.

Depicting Company Structure in the SAP System

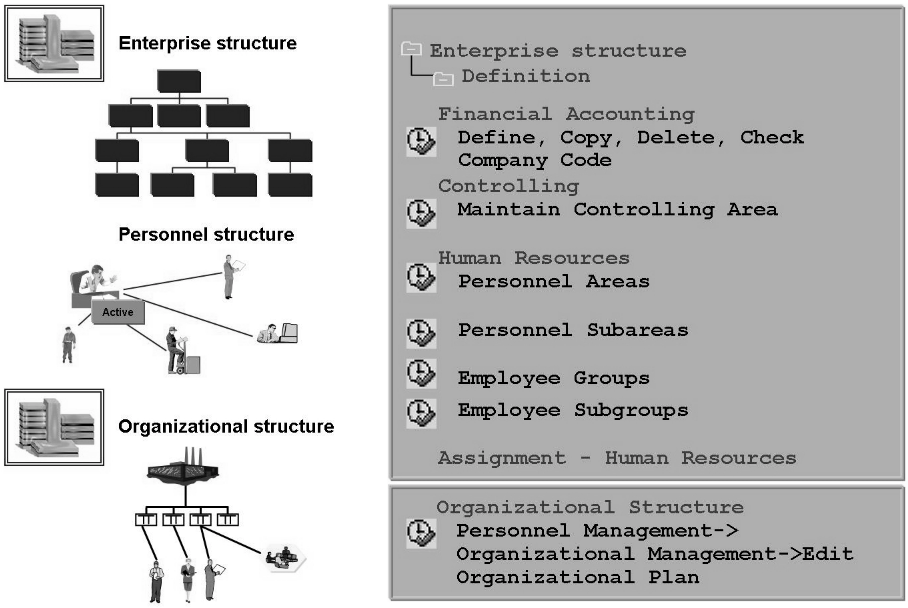


Figure 175: Depicting Company Structure in the SAP System

As the structure of your company has changed, you need to modify the structure currently in the system. You must depict the purchase of the production plant in the enterprise structure.

In addition to these changes, the manufacturing plant contains employees that do not exist in the company, for example, hourly-paid employees.

You must add the organizational units, jobs and positions to the organizational structure.

An overview of the necessary Customizing steps appears on the right.

Parts of the Enterprise Structure

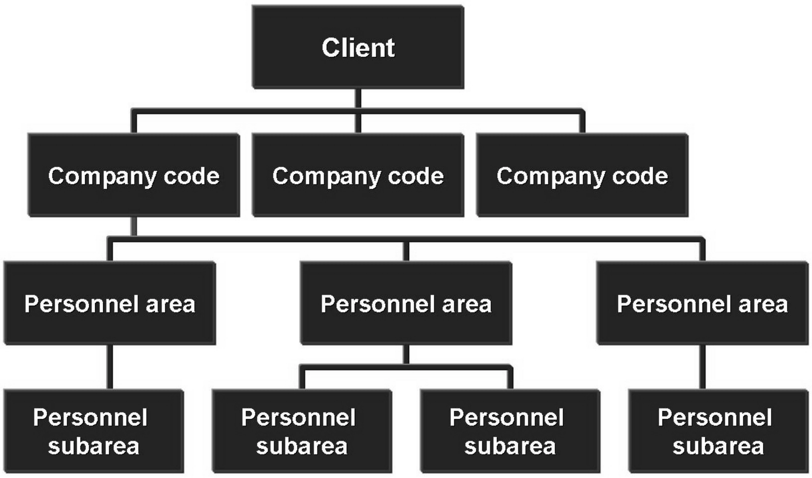


Figure 176: Overview: Enterprise Structure

The following elements define the SAP enterprise structure for Personnel Administration:

- Client
- Company code
- Personnel area
- Personnel subarea

A **client** can either be valid for a company code at the smallest level, or the entire corporate group. The **company code** is defined in financial accounting. The balance sheet and profit and loss statements are drawn up at the company code level. The **personnel area**, which is only used in Personnel Administration, is unique in each client. You must assign each personnel area to a company code. You also use the **personnel subarea** only in Personnel Administration and it is the smallest element of the enterprise structure. You link the groupings that define the entries to be used for employees of a particular company code/personnel area to the personnel subarea.

The client is an independent legal and organizational unit of the system (for example, group).
A three-character alphanumeric code uniquely identifies the different clients within a system.

- **No data exchange between clients (only in exceptional cases)**
- **No access to employee data in other clients**
- **No cross-client evaluations or access authorizations**
- **An employee who changes from one client to another must be assigned a new personnel number**

Figure 177: Enterprise Structure - Client

Client 000 contains the original SAP system, and you cannot change it. Client 001 is also delivered to customers. Both systems are identical when they are delivered.

The system contains both client-independent and client-specific elements.

Elements that SAP describes as client-independent are used in all clients. However, client- specific elements are only used in certain special clients.

The following are defined as client-independent:

- Data structures such as field definitions, table structures and file structures, client-independent tables, transactions, programs, standard evaluations, authorization objects, help documentation, and user-defined programs.

The following are defined as client-specific:

- Client-specific tables (you must copy these from the original client), HR master records, user master records, and authorization profiles.

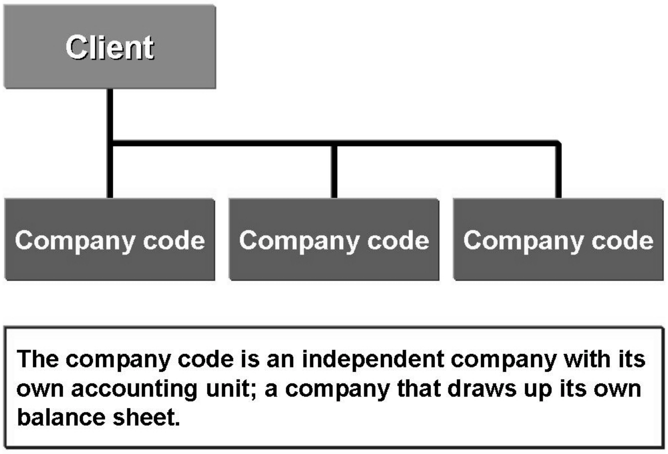


Figure 178: Enterprise Structure - Company Code

The company code represents the highest level of the enterprise structure within a client. If you use the Controlling, Financial Accounting, Materials Management or Sales and Distribution application components as well as the Personnel Administration application component, you must coordinate the company code setup with the other application components. This does not impose any restrictions in the Human Resources areas, as you define all the most important control information at the personnel subarea level anyway.

You define the country grouping at the personnel area level, but each country grouping must be unique within the company code. In other words, you must assign the same country grouping to all personnel areas within a company code. The country groupings control master data entry and the setting up and processing of wage types and pay scale groups in Payroll on a country-specific basis.

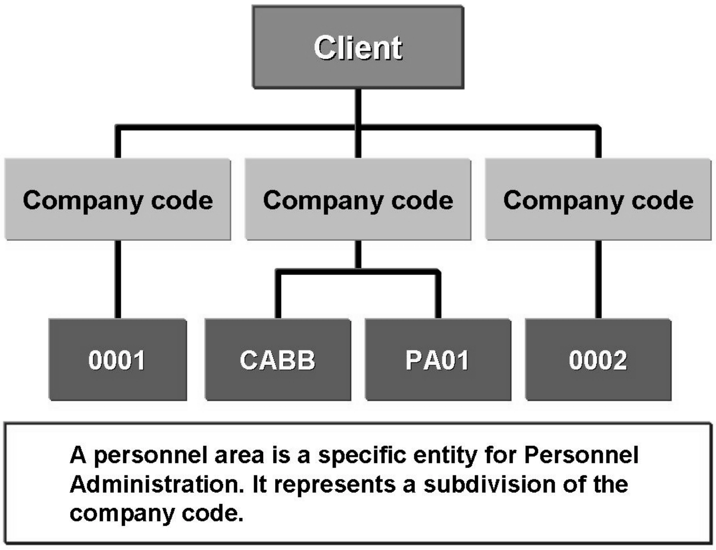


Figure 179: Enterprise Structure - Personnel Area

The personnel area has the following functions:

- The personnel area is a selection criterion for evaluations.
- The personnel area is an entity for authorization checks.
- You must uniquely assign personnel areas to company codes.
- You can use the personnel area to generate default values for data entry, for example, for the payroll area.

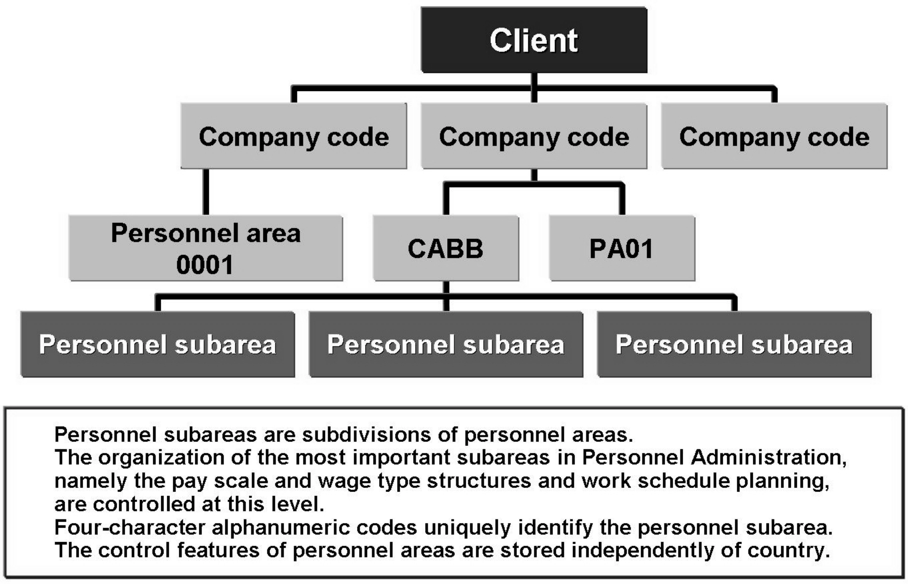


Figure 180: Enterprise Structure - Personnel Subarea

Personnel areas are divided into personnel subareas. You define the regulations for employees at the personnel area and personnel subarea level. These may be legal, contractual, or company-specific regulations. You assign a company code to a personnel area. You must add to the company code any financial accounting data relevant to the personnel area. You must define one pay scale area, one pay scale type, and one holiday calendar for each personnel subarea.

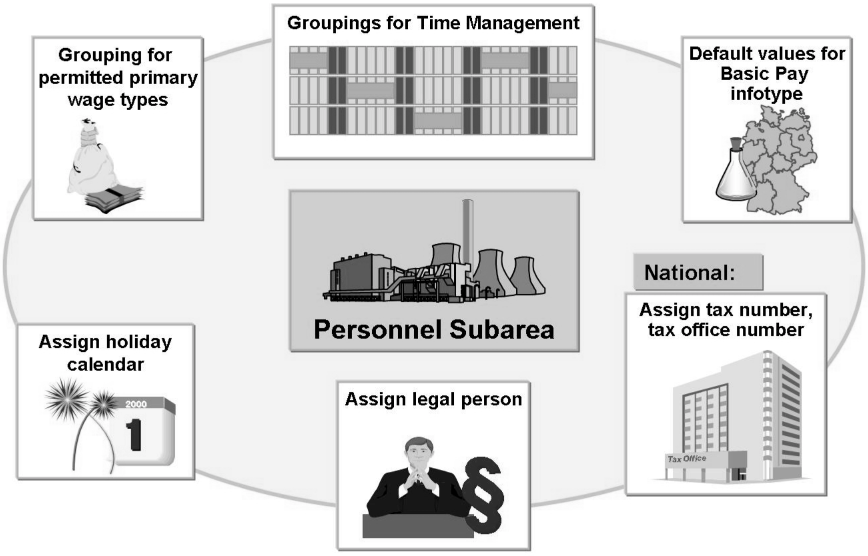


Figure 181: Indicators Defined Using the Personnel Subarea

The following indicators are defined by the personnel subarea:

- International (T001P)
  - Default values for pay scale area and pay scale type
  - Assignment of personnel subarea to a public holiday calendar, legal person, and statistics group
  - Grouping of personnel subareas for vacation, work schedule, attendance and absence types, substitution and availability types, attendance and absence counting, time recording, time quotas, and premiums.
  - Personnel subarea grouping for permissibility of primary wage types
  - Grouping of personnel subareas for appraisals
- National (for example, for Germany in T5D0P)
  - Assignment of tax relevant corporate features (church tax area, tax office number, tax number)
  - Flat-rate Church Tax
  - DUEVO check
  - Miner's and mine-employee's insurance company number

Enterprise Structure for CAB Company

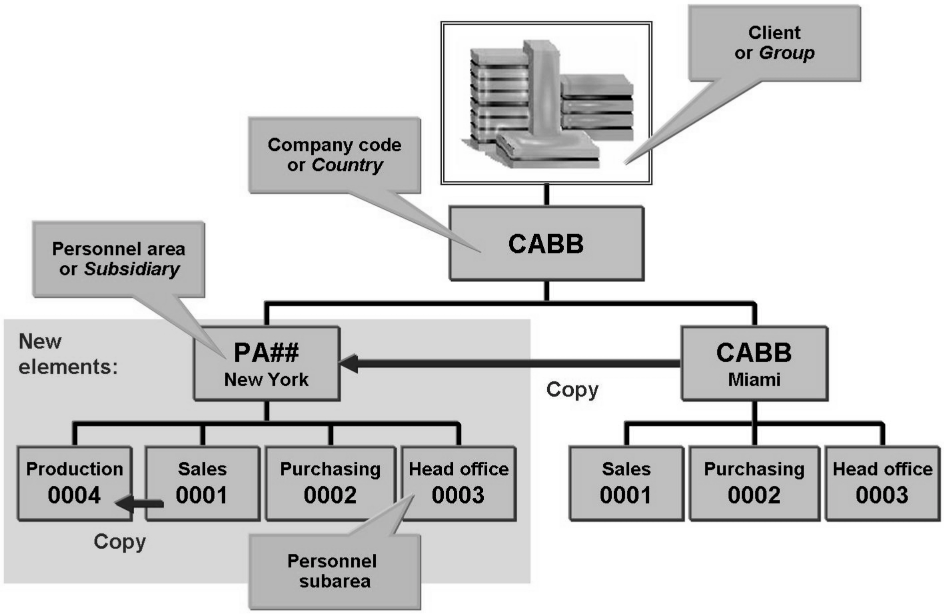


Figure 182: Enterprise Structure of Your Company

You must depict the structure of your company in the SAP system. The graphic shows the enterprise structure of your company, which is an example of how to depict an enterprise structure in the SAP system.

To create a new personnel (sub)area, SAP recommends that you copy an existing personnel (sub)area using an entity copier.

Enterprise Structure Copy Function

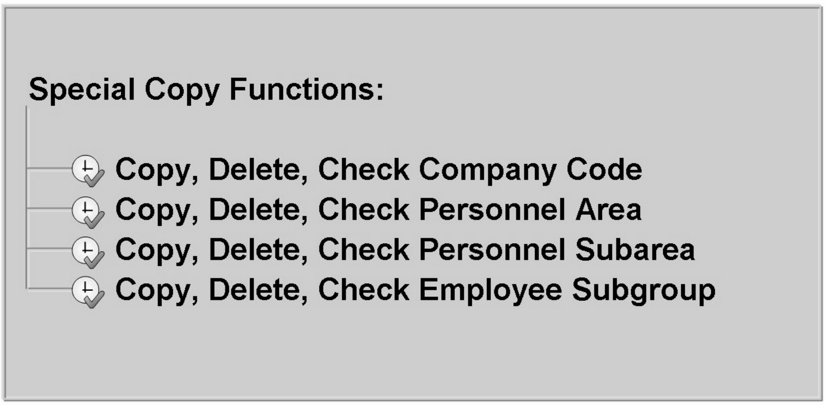


Figure 183: Enterprise Structure: Copy Function (1)

You can use the copy function to create new elements of the enterprise structure quickly and easily, so that you do not have to call up the subsequent tables individually.

You can use the copy function for company codes, personnel areas, personnel subareas, and employee subgroups. You can:

- Copy
- Delete
- Check
- Create and edit project IMG views

A number of control indicators are connected to elements of the company structure. You can then access them on subsequent screens.

Enterprise Structure: Copy Function (2)

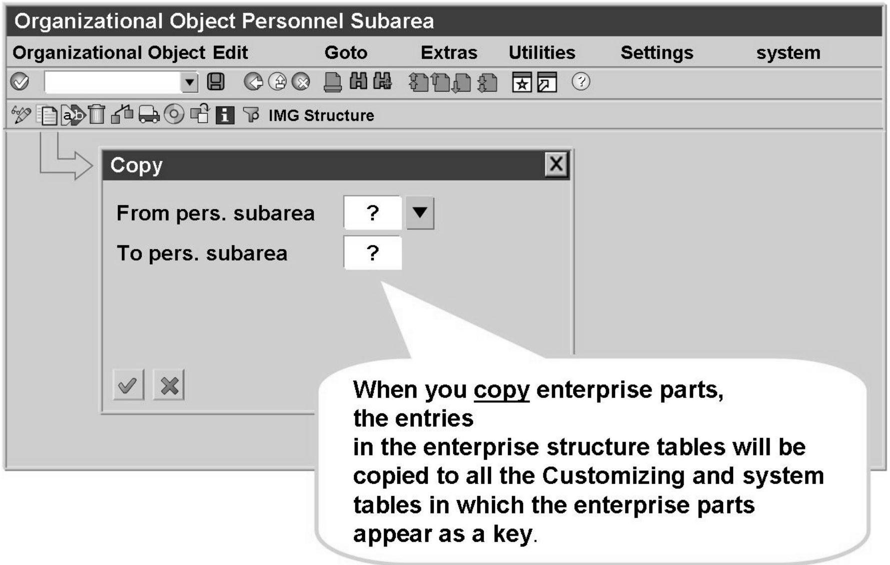


Figure 184: Enterprise Structure: Copy Function (2)

Copy

Use this function if you want to create a new organizational entity and use the existing settings as a template.

If you have already carried out the system settings for the organizational unit that you have just created, you can still use the copy function. In this case, the system only duplicates the entries that are missing. Existing entries remain unchanged. The result of this copy action is a project IMG view that contains all the objects changed by the copy action. This means that you can post-process the entries that the system has copied.

Delete

Use this function if you want to delete an existing organizational unit and all of its dependent entries.

Check

Use this function to check the settings of existing organizational units.

The check is carried out in two steps:

In the first step, the system checks to see whether there is an entry in all the tables in which the organizational entity specified is entered as a table key.

In the second step, the system checks to see whether there is an entry in the dependent tables validated against the table key.

281

Exercise 14: Enterprise Structure

Exercise Duration: 15 Minutes

Exercise Objectives

After completing this exercise, you will be able to:

- Create a personnel area and a personnel subarea.

Business Example

The recently purchased production plant must be created as a personnel area of the local company. In this personnel area, there will be a head office, a purchasing department, and a production department.

Task 1:

For the following exercises, use the **project IMG HR305**.

Create the new personnel area **PA##**, (## = your group number) and give it the name **Gr##**, which should be a copy of personnel area *CABB Caliber A Bicycle Company*.

1. In the *Personnel Areas* IMG activity, use the Copy function to create your new personnel area.
2. Use the *Create Personnel Areas* action to change the name of your newly created personnel area.

Task 2:

Create the new personnel subarea **0004**, and name it **Production ##**. This personnel subarea should be a subunit of your personnel area PA##.

1. Use the Copy function in the IMG activity *Personnel Subareas* to create your new personnel subarea based on the subarea *Sales (0001)* in the personnel area *PA##*.
2. Use the *Create Personnel Subareas* action to change the name of your newly created personnel subarea.

Solution 14: Enterprise Structure

Task 1:

For the following exercises, use the **project IMG HR305**.

Create the new personnel area **PA##**, (## = your group number) and give it the name **Gr##**, which should be a copy of personnel area *CABB Caliber A Bicycle Company*.

1. In the *Personnel Areas* IMG activity, use the Copy function to create your new personnel area.
   a) *SAP Menu: Tools → Customizing → IMG → Execute Project.*
   b) Select the project IMG *HR305* from your worklist (double click), or go directly into your IMG if you have defined it as a standard project.
   c) *Enterprise Structure → Definition → Human Resources → Personnel Areas*
   d) Select the action: *Copy, Delete, Check Personnel Area*.
   e) Choose *Copy org.object*.
   f) Enter *CABB* in the *From personnel area* field. Enter *PA##* in the *To personnel area* field.
   g) Choose *Enter*.
   h) Note the system message *Note the list of affected features in the statistics*.
   i) Note the system message *Personnel area CABB was copied to PA##.*
   j) Return to the *Choose Activity* dialog box.
2. Use the *Create Personnel Areas* action to change the name of your newly created personnel area.
   a) Select the *Personnel Areas* action.
   b) Select your own personnel area and choose Details.
   c) Assign it a name that contains your group number and, if required, a new address.

Continued on next page

Task 2:

Create the new personnel subarea **0004**, and name it **Production ##**. This personnel subarea should be a subunit of your personnel area PA##.

1. Use the Copy function in the IMG activity *Personnel Subareas* to create your new personnel subarea based on the subarea *Sales (0001)* in the personnel area *PA##*.
   a) *Enterprise Structure → Definition → Human Resources → Personnel Subareas*
   b) Select the action: *Copy, Delete, Check Personnel Subarea*.
   c) Choose *Copy org.object*.
   d) In the *From personnel subarea* field, enter the value *0001* (Sales) of personnel area *PA##* from the list of possible entries. Enter *0004* in the *To personnel subarea* field.
   e) Choose *Continue*.
   f) Note the system message: *Data already exists for organizational object 0004. Do you want to complete this organizational object?* Select *Yes*.
   g) Note the system message *Note the list of affected features in the statistics*.
   h) When the system requests the personnel area, enter *PA##*.
   i) Note the system message *Personnel subarea 0001 was copied to 0004.*
   j) Return to the *Choose Activity* dialog box.
2. Use the *Create Personnel Subareas* action to change the name of your newly created personnel subarea.
   a) Select the *Create Personnel Subareas* action.
   b) Enter the personnel area *PA##*.
   c) Change the name of personnel subarea *0004* to *Production ##*.
   d) Choose *Save* and return to the IMG.

Lesson Summary

You should now be able to:

- Describe the meaning and elements of the enterprise structure
- Modify the enterprise structure using the entity copier

Lesson: Personnel Structure

285

Lesson Duration: 45 Minutes

Lesson Overview

The elements of Personnel Structure are explained in this lesson and modified using the entity copier.

The options for checking the modified structure are explained.

Lesson Objectives

After completing this lesson, you will be able to:

- Describe the meaning and elements of the personnel structure
- Understand the modification of the personnel structure using the entity copier
- Check the assignments

Further information can be found in the Instructor Guide in SAPNet.

Business Example

Since a new manufacturing plant was bought, it is necessary to map the new personnel structure in the SAP system.

Overview of Personnel Structure

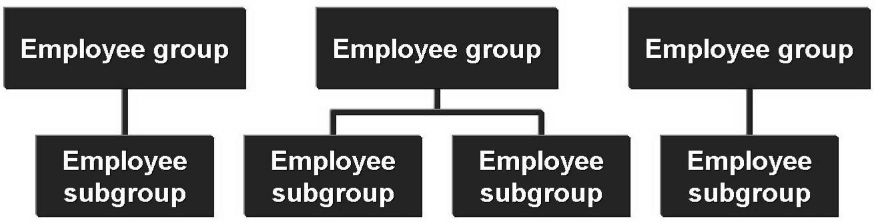


Figure 185: Overview: Personnel Structure

The personnel structure displays the position of individual people in the enterprise as a whole.

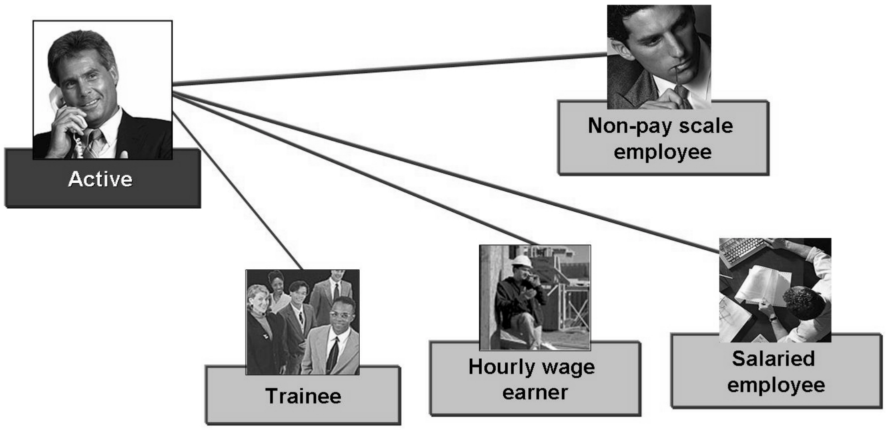
Parts of the Personnel Structure

The employee group is used to classify employees in general terms.
It defines the position of the employee within the company's workforce.

Figure 186: Personnel Structure: Employee Group

The employee group has the following important organizational functions:

- You can use it to generate default values for data entry, for example, for the payroll accounting area or an employee's basic pay.
- You can use it as a selection criterion for reporting.
- You can use it as an entity for authorization checks.
- As a rule, you can use the standard entries in the system for setting up employee groups. If necessary, you can also add to these entries so that they meet your requirements.



Employee groups are divided into employee subgroups.
Active employees can be split up into categories according to their status, for example, trainees, hourly wage earners, and salaried employees.
All control features for the personnel structure are defined at the employee subgroup level.

Figure 187: Personnel Structure - Employee Subgroup

An employee group consists of a number of employee subgroups. For example, the following employee subgroups make up the 'Active' employee group:

- Hourly wage earners
- Monthly wage earners
- Pay scale employees
- Non-pay scale employees

You define each employee subgroup in Customizing assigning a two character alphanumeric identifier to each.

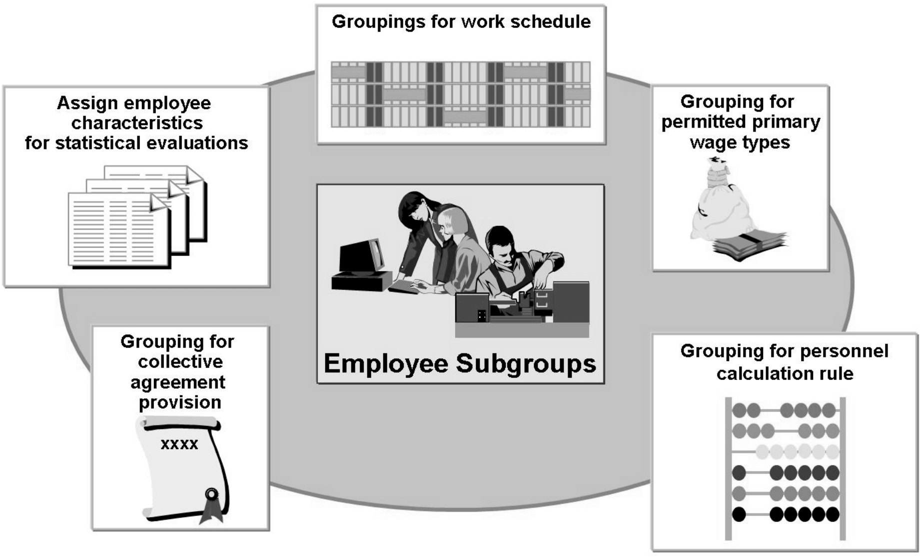


Figure 188: Indicators Defined By Employee Subgroups

You can use the employee subgroup to set the following indicators:

- International
  - The employee subgroup grouping for the work schedule allows you to define which work schedules are valid for which employees.
  - The employee subgroup grouping for primary wage types controls the validity of wage types at the employee subgroup level.
  - The employee subgroup grouping for the personnel calculation rule controls how the system processes an employee's payroll, for example, whether an employee is to be paid on an hourly or monthly basis.
  - The grouping for collective agreement provision restricts the validity of pay scale groups to specific employee subgroups.
  - You can also assign employee characteristics, such as the activity status, employment status, and level of education/training, for statistical purposes.
  - Additional indicators that can be set using the employee subgroup:

    ▷The employee subgroup grouping for time quotas allows you to specify which attendance and absence quota types are valid for which employee subgroups.

    ▷The employee subgroup grouping for appraisals allows you to define appraisal criteria for each employee subgroup.

    ▷The employee subgroup allows you to define default values for data entry, for example, for the payroll area or basic pay.
- National (for example, Germany)
  - Default values for social insurance

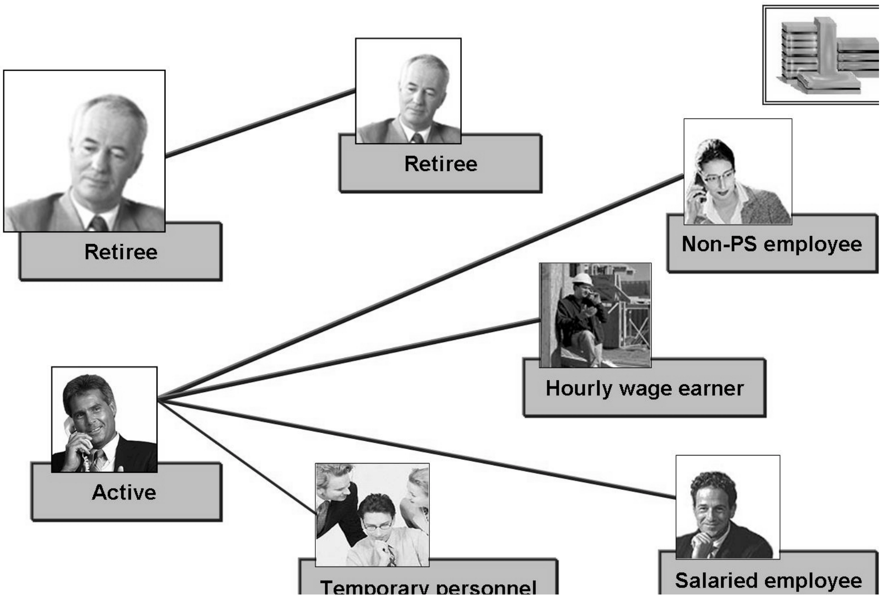


Figure 189: Personnel Structure in Your Company

You must depict the changes to the personnel structure in your company in the SAP system.

The graphic shows your company's personnel structure, which you can use as an example of how to depict a personnel structure in the SAP system.

Assignments

Personnel Area - Company Code

Pers.area	Personnel area text	Company code	Name of company	Country Grpg
AT01	Personnel Area AT01	AT01	Country Template AT	03
AV01	Australian Personnel	AV01	Country Template AV	13
BE01	Personnel area BE01	BE01	Country Template BE	12
CA01	Personnel area CA01	CA01	Country Template CA	0

The country grouping classifies countries according to human resource focal points.

Employee Group - Employee Subgroup

EEGrp	EE group text	EESgrp	EE Subgroup text
1	**Active**	X0	**Salaried EE**
1	**Active**	X1	**Hourly wage earner**

EE group 1 Active
EE subgroup DA Trainee ind.

Ctry	Name	Allowed
	Germany	✓
	Switzerland	
	Austria	

Figure 190: Assignments

You define the relationship between organizational entities here.

- Your personnel area is assigned to a company code. When you create a personnel number, the system assigns a relevant company code in the Organizational Assignment infotype (0001) depending on which enterprise structure you have assigned the employee. In addition, you assign the country grouping to a personnel area in this table. Make sure that you assign all personnel areas in one company code to the same country grouping.
- Assign your employee subgroups to the relevant employee groups. You can also define permissible employee group/employee subgroup combinations for your country groupings. For example, you should assign the employee subgroup Trainee to the employee group Active and not to the employee group Retiree.

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Exercise 15: Personnel Structure

Exercise Duration: 10 Minutes

Exercise Objectives

After completing this exercise, you will be able to:

- To copy an employee subgroup and check the assignments of the company structure and the personnel structure

Business Example

In the personnel subarea Production, there will be a new group of hourly wage earners, which must be created as an employee subgroup.

Task 1:

Create a new employee subgroup for the production plant. Use your group number (##) as a new employee subgroup number.

1. In the *Employee Subgroups* IMG activity, use the Copy function to copy your new employee subgroup (##) from employee subgroup **X1 Hourly wage earners**.
2. Use the *Define Employee Subgroup* action to change the name of your new employee subgroup. The new name should contain your group number.

Task 2:

Take a look at the steps in your project IMG that are linked to your new enterprise structure, and answer the following questions:

1. To which company code is your new personnel area *PA##* assigned? Why has the system already made this assignment?

____
____
____
____

Continued on next page

2. Which country grouping is assigned to this company code?

3. Why are country groupings essential to HCM components?

4. Describe, in your own words, the basic difference between an assignment and a grouping.

Task 3:

The following exercises are optional.

Take a look at the steps in your project IMG that are linked to your new employee subgroup, and answer the following questions:

1. Is your new employee subgroup (##) assigned to employee group *1 Active* and country grouping 99 (other countries)?

2. What do you set up with the Customizing step *Employee Subgroups for Primary Wage Type*?

Solution 15: Personnel Structure

Task 1:

Create a new employee subgroup for the production plant. Use your group number (##) as a new employee subgroup number.

1. In the *Employee Subgroups* IMG activity, use the Copy function to copy your new employee subgroup (##) from employee subgroup **X1 Hourly wage earners**.
   a) *Enterprise Structure → Definition → Human Resources Management → Employee Subgroups*. Select the *Edit employee subgroup environment* action.
   b) Choose *Copy org.object*.
   c) In the *From employee subgroup* field, enter the employee subgroup *X1 Hourly wage earner*, and in the *To employee subgroup* field, enter your group number.
   d) Note the system message *Please note the list of affected features in the statistics*.
   e) Select *Continue*.
   f) Note the system message *Employee subgroup X1 was copied to ##.*
   g) Return to the *Choose Activity* dialog box.
2. Use the *Define Employee Subgroup* action to change the name of your new employee subgroup. The new name should contain your group number.
   a) Select the action *Define Employee Subgroup*.
   b) Select *Position* to find your employee subgroup (##).
   c) Change the employee description for the employee subgroup to *Hourly wage earner ##.*
   d) Choose *Save* and return to the IMG.

Continued on next page

Task 2:

Take a look at the steps in your project IMG that are linked to your new enterprise structure, and answer the following questions:

1. To which company code is your new personnel area *PA##* assigned? Why has the system already made this assignment?

   Answer: CABB

   To find this information, proceed as follows in the IMG:

   Enterprise Structure → Assignment → Human Resources Management → Assignment of Personnel Area to Company Code

   Search for the personnel area *PA##* using *Position*.

   Look at the entry in the *Company code* field: *CABB*.

   The system made the assignment automatically when you copied the personnel area in the preceding exercise. The copy template (personnel area CABB) is also assigned to company code CABB.

2. Which country grouping is assigned to this company code?

   Answer: Country grouping 99 (other countries)

   To find this out, proceed as follows in the IMG:

   Enterprise Structure → Assignment → Human Resources Management → Assignment of Personnel Area to Company Code

   Search for the company code CABB using *Position*.

   Look at the entry in the *Country grouping* field: *99*.

3. Why are country groupings essential to HCM components?

   Answer: Within the HR component, country groupings serve to differentiate between countries according to human resources criteria.

   Technically, the country grouping is a key field in tables that allows you to create data, such as wage types and pay scale tables, for specific countries. This, for example, allows you to run payroll for several countries.

4. Describe, in your own words, the basic difference between an assignment and a grouping.

   Answer: For an assignment, you link a personnel subarea or employee subgroup directly with another subject.

   For a grouping, you first group together personnel subareas or employee subgroups that share certain attributes. Then you allocate this grouping to another subject in a second Customizing step.

Continued on next page

Task 3:

The following exercises are optional.

Take a look at the steps in your project IMG that are linked to your new employee subgroup, and answer the following questions:

1. Is your new employee subgroup (##) assigned to employee group *1 Active* and country grouping 99 (other countries)?

   Answer: *IMG: Enterprise Structure → Assignment → Human Resources Management → Assign Employee Subgroup to Employee Group*

   Select *Position* to find your employee subgroup. Check whether your employee subgroup (##) is assigned to the employee group Active *(1)*. If you double click this line for your employee subgroup, or if you choose *Details*, the system displays the country grouping assigned to your employee subgroup.

   Note: *The system made this assignment automatically when you copied the employee subgroup in the previous exercise.*

   Return to the IMG.

2. What do you set up with the Customizing step *Employee Subgroups for Primary Wage Type*?

   Answer: *IMG: Personnel Management → Personnel Administration → Payroll Data → Basic Pay → Wage Types → Employee Subgroups for Primary Wage Type*

   You can group together your employee subgroups. In other words, all employee subgroups that are identical in terms of the permissibility of primary wage types.

   Your employee subgroups ## may have grouping 1 (because copy template X1 Hourly wage earners also has this grouping). In a further Customizing step, you can specify which wage types can be used for this employee subgroup grouping. This also means these wage types would be used for all employee subgroups with grouping 1. There is more information on this in a later unit.

Lesson Summary

You should now be able to:

- Describe the meaning and elements of the personnel structure
- Understand the modification of the personnel structure using the entity copier
- Check the assignments

Unit Summary

You should now be able to:

- Describe the meaning and elements of the enterprise structure
- Modify the enterprise structure using the entity copier
- Describe the meaning and elements of the personnel structure
- Understand the modification of the personnel structure using the entity copier
- Check the assignments

Unit 10

301

Organizational Structure

Further information can be found in the Instructor Guide in SAPNet.

Unit Overview

This section explains the most important elements of an organizational structure and how they relate to each other. In Organizational Management, you store default values for a position that then appear in Personnel Administration in the relevant fields when you hire a new employee. In Customizing, you will see where you can switch integration on and off in the IMG.

Unit Objectives

After completing this unit, you will be able to:

- Map the organizational structure of your company in the SAP system
- Set up the link between the Organizational Structure and the Enterprise Structure.

Unit Contents

Lesson: Organization Structure

302

Lesson Duration: 50 Minutes

Lesson Overview

The most important parts of organizational structure are discussed in this lesson.

The organizational structure is described in Organizational Management in the “Change Organization and Staffing” screen.

Data stored on the position should be proposed in Personnel Administration from Organizational Management when integration has started.

Lesson Objectives

After completing this lesson, you will be able to:

- Map the organizational structure of your company in the SAP system
- Set up the link between the Organizational Structure and the Enterprise Structure.

Further information can be found in the Instructor Guide in SAPNet.

Business Example

Buying a production plant has also caused your reporting and cost center structure to change.

In addition, there is a large number of new employees that you need to include in your company's organizational plan.

The changes to your organizational structure have already been made. It is your task to create a link to Personnel Administration.

Organizational Plan

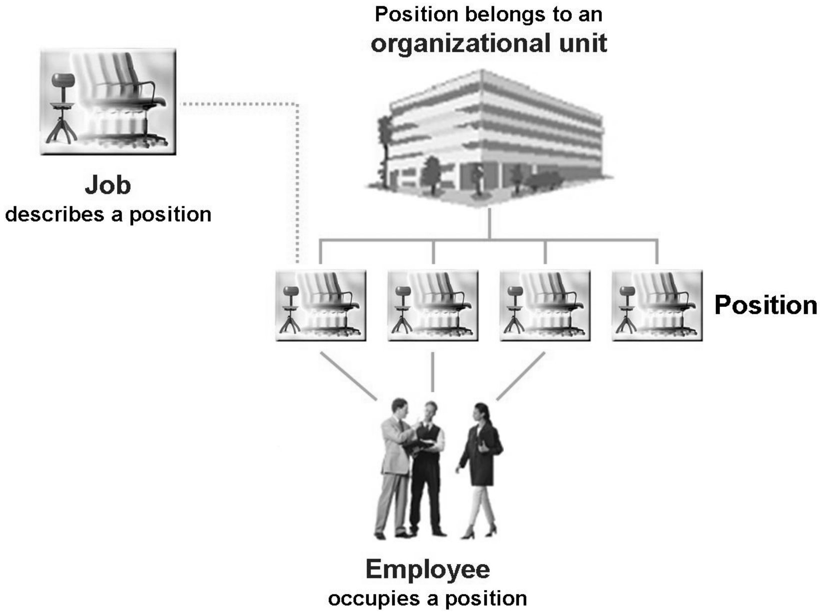


Figure 191: Organizational Plan

The organizational plan depicts the organizational structure. A company uses an organizational plan to represent the relationships between individual departments and work groups. The SAP system uses **organizational units** for this.

The “Purchasing” department, or organizational unit, employs one secretary, one manager, and 10 purchasers. The department has 12 **positions**.

Persons or employees carry out activities. Persons are a fundamental part of the organizational structure.

Parts of Organizational Management

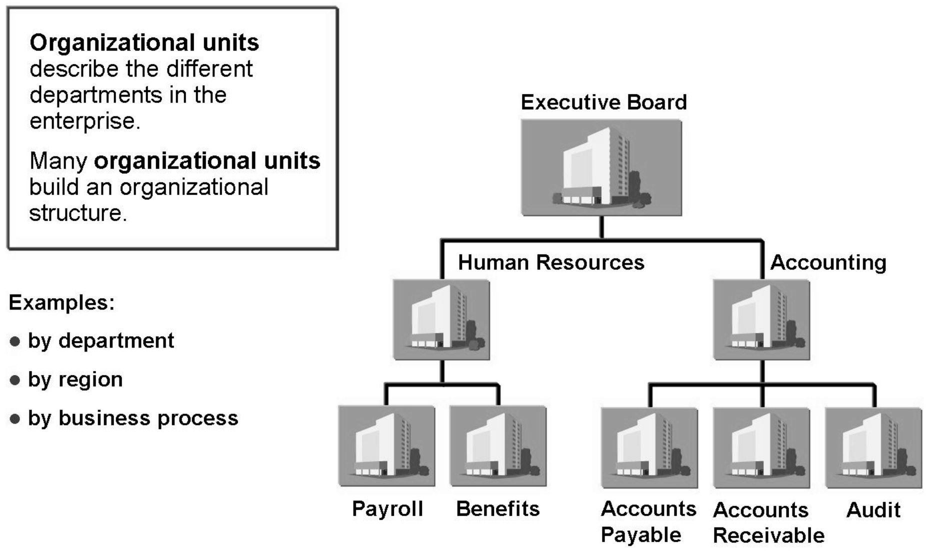


Figure 192: Organizational Units

You can divide organizational units generally (according to regional aspects) or more precisely (according to project group). This depends on the company-specific requirements.

Organizational units could be departments, teams, groups, and so on.

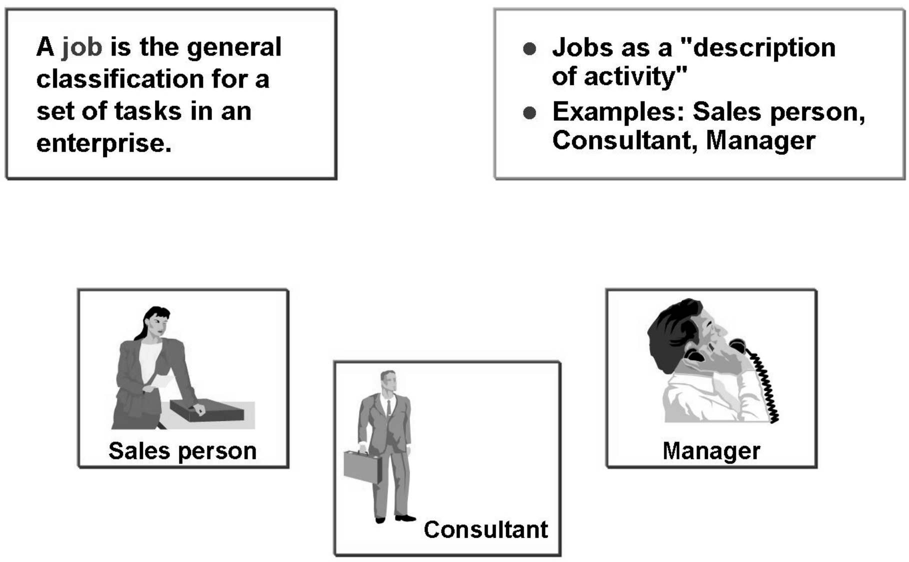


Figure 193: Jobs

Positions describe concrete areas in an enterprise that need to be covered by available personnel (such as European Manager). **Jobs**, however, are a general classification of tasks within the enterprise (such as Manager). You can further define these jobs by assigning characteristics. In this way, you create job descriptions valid for several positions with similar tasks and characteristics.

When you create a new position (such as European Manager), you can link it to an existing job (such as Administrator). This ensures that the new position automatically inherits the tasks and characteristics assigned to the job.

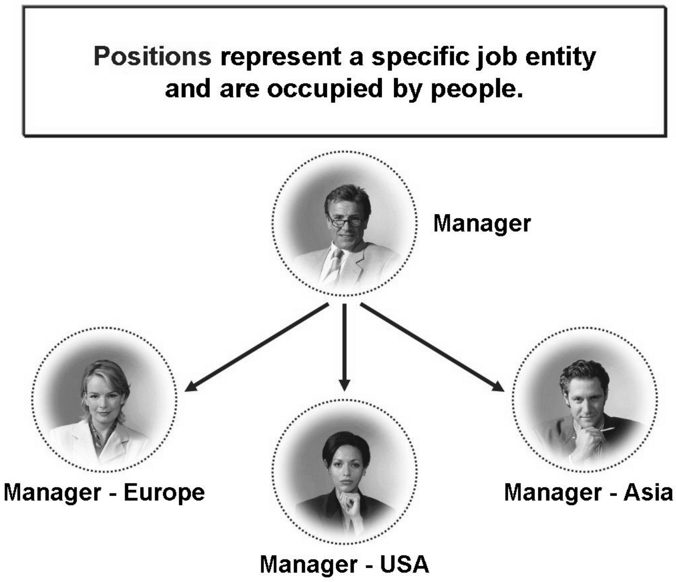


Figure 194: Positions

You assign the employees in your company to positions. This ensures that the employees are included in the organizational structure. By using additional data created in the system, such as links, you can also map the reporting structure of your company.

You can also link pay to positions, for example. You maintain the data for valuating a position in the Wage Type Structure unit in the "Basic Pay" section. This applies if you have employees whose pay is based on the value of a position.

Example: you have employees who you assigned to a position in the Organizational Assignment infotype (0001). The pay for this position is x EURO. The employee is to be remunerated with the value for this position (ARBPL module. For more information on this, refer to the the Wage Type Structure unit).

Organizational Structure of Your Company

Figure 195: Organizational Structure of Your Company (1)

The graphic shows how you map your company's organizational structure in the SAP system.

You define the different departments and subdivisions as organizational units. This often reflects a company's cost center hierarchy.

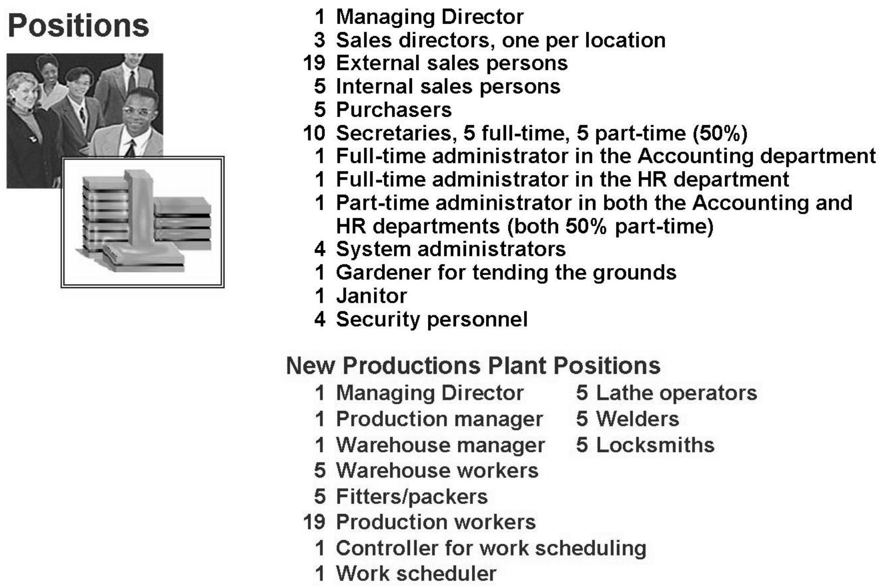


Figure 196: Organizational Structure of Your Company (2)

The graphic shows your company's organizational structure, which you can use as an example of how to depict an organizational structure in the SAP system.

Employees occupy the individual positions.

Integration Between Organizational Management and Personnel Administration

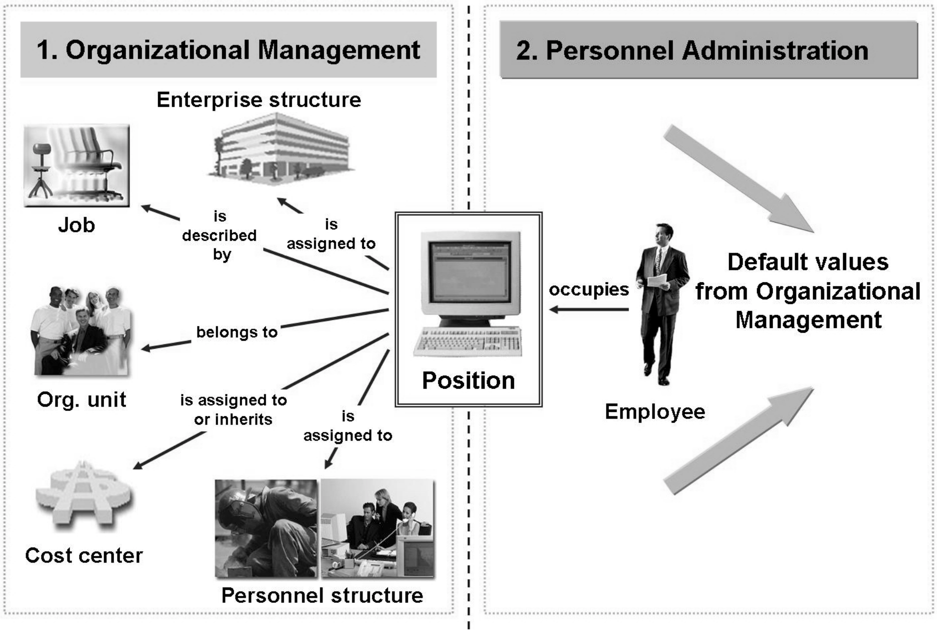


Figure 197: Integration Between Organizational Management and Personnel Administration

If you integrate Personnel Administration and Organizational Management, you can enter a position in the Actions infotype (0000). By doing this, the system proposes the values stored in Organizational Management for employee group, employee subgroup, personnel area, and personnel subarea as default values.

The system also includes the values for job, organizational unit, and cost center, but you cannot overwrite these entries in the Organizational Assignment infotype (fixed assignment).

"Change Organization and Staffing" Transaction

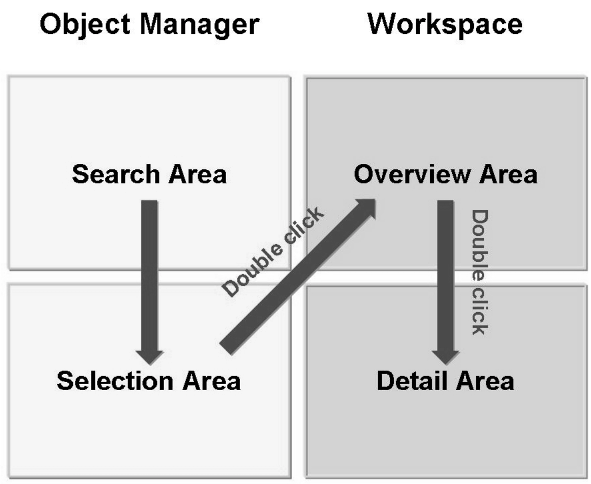


Figure 198: Change Organization and Staffing screen layout

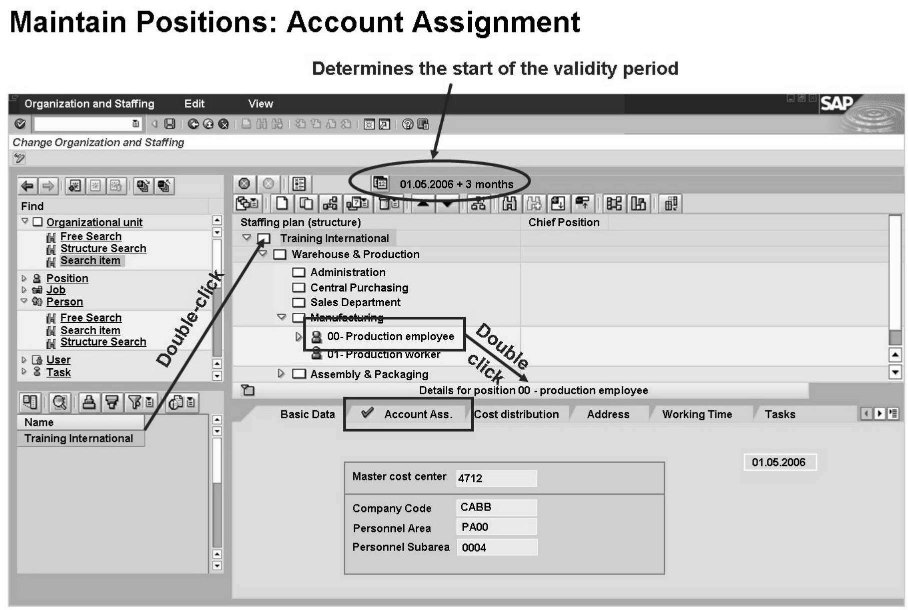


Figure 199: Maintain Positions: Account Assignment

You can set up the following using the **Account Assignment** tab page:

- The graphic shows you how the system stores the relationships between the positions and the *enterprise structure*.
- To depict your enterprise's *Cost Center hierarchy* in the system, you link the cost centers to the relevant organizational units. You can also link the cost centers to jobs and positions.

Maintain Positions: Working Time

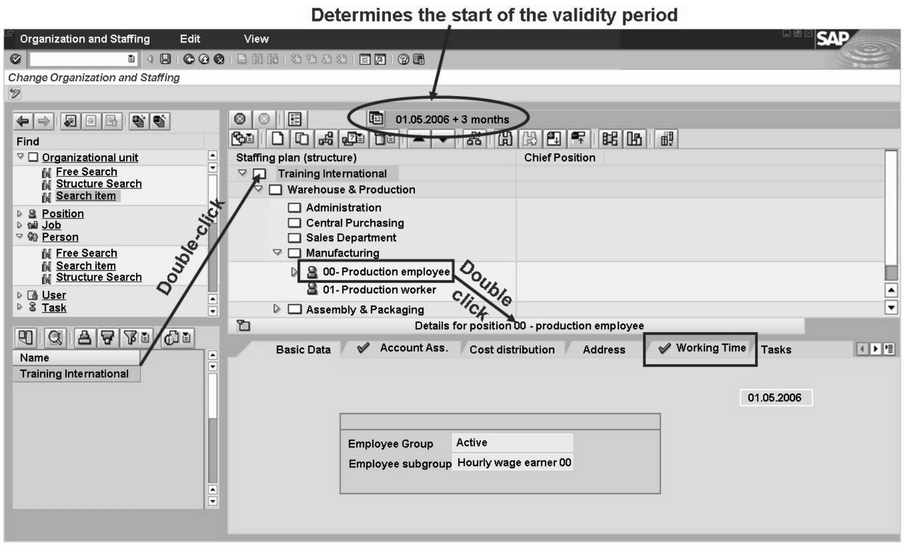


Figure 200: Maintain Positions: Working Time

You can set up the following using the **Working Time** tab page:

- The graphic shows you how the system stores the relationships between the positions and the personnel structure.

Consequnces of Integration

Entering the Position in the Actions Infotype

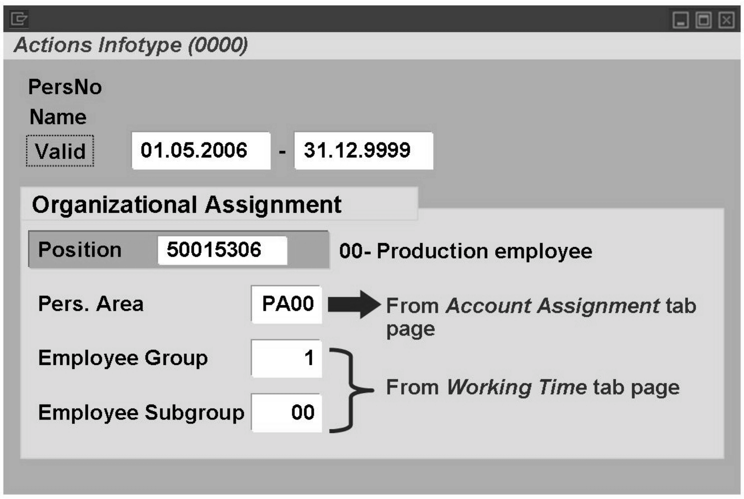


Figure 201: Entering the Position in the Actions Infotype

If you integrate Personnel Administration and Organizational Management, you can enter the position in the Actions infotype (0000) when you run a hiring action. By entering the position, the system propagates the data stored in Organizational Management into the fields in the Actions infotype (0000) as shown in the graphic.

Values from Organizational Management

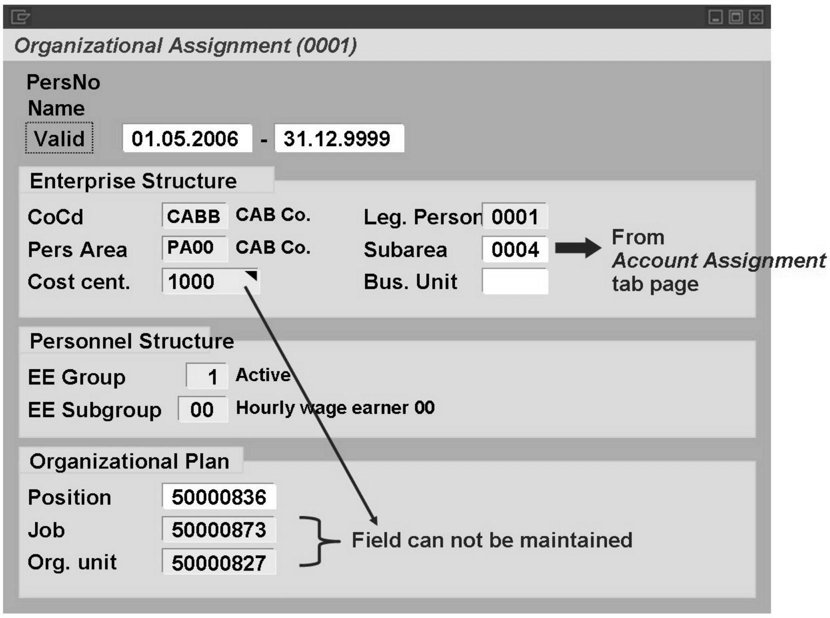


Figure 202: Values from Organizational Management

The system takes the default values for the employee group and subgroup from the data stored on the position in the Employee Group/Subgroup infotype (1013), which you can maintain on the **Working Time** tab page.

The system takes the default values for the business area, personnel area, and the personnel subarea from the data stored on the position (or the organizational unit) in the Account Assignment Features infotype (1008), which you can maintain in the **Account Assignment** tab page.

If the Personnel Administration and Organizational Management components **are not integrated**, you must manually enter the values for the cost center, position, job, and organizational unit in the Organizational Assignment infotype.

However, if Organizational Management **is integrated**, you cannot maintain these fields in the Organizational Assignment infotype. The system fills these fields automatically from Organizational Management.

Activate Integration

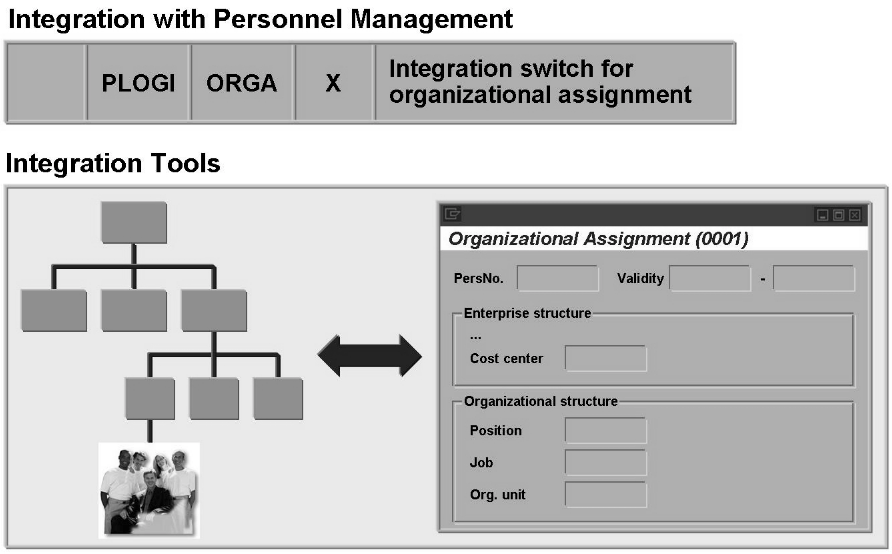


Figure 203: Setting Up Integration between Personnel Administration and Organizational Management

The system stores the relationship between Personnel Administration and Organizational Management in Customizing: *Personnel Management → Organizational Management → Integration → Integration with Personnel Administration → Set up Integration with Personnel Administration: Basic Settings.*

Use the PLOGI ORGA switch to determine whether integration with the Organizational Assignment infotype (0001) takes place.

You can use the PLOGI feature in conjunction with the organizational assignment (employee subgroup, personnel area, and so on) to specify which groups of employees can participate in integration. There are several ways to activate integration. This depends on the system you use in the company.

- You have implemented Personnel Administration and would like to re-customize Organizational Management. In this instance, the system converts the entries in the relevant Personnel Administration tables for the personnel planning objects.
- You have implemented Organizational Management and would like to re-customize Personnel Administration. You can automatically copy and transfer the existing entries from the Organizational Assignment infotype (0001).
- You want to implement both components again. You do not have to manually enter the data in Personnel Administration as the data that was entered when the systems were previously integrated will be maintained in the Organizational Management component.

313 Exercise 16: Organizational Structure

Exercise Duration: 15 Minutes

Exercise Objectives

After completing this exercise, you will be able to:

- Store a link between a position and the enterprise and personnel structure

Business Example

An organizational structure has already been created with several production worker positions. You now need to create the link between a position and your new structure elements. This ensures that any new employees who you hire for this position are automatically included in your company's organizational structure. You will complete the hiring process for these employees in later units.

Task 1:

Go into Organizational Management, and into the change mode for *Organization and Staffing*, and search for the organizational unit CABB. In the Training International area is the *Production* organizational unit, which contains the *Central Production* organizational unit, which in turn contains the *## Production Worker* positions.

Select the position for your group number by double-clicking it, and edit the details for your position. Make sure that the start date under *Date and Preview Period* is set to the first of this month. You should also use this date as the hiring date for the second employee you hire.

1. Edit the *Account assignment* tab page to assign your production worker position *(## Production Worker)* to the company code *CABB*, the personnel area *PA##*, and your personnel subarea *Production (0004)*. Leave the remaining fields blank.
2. Edit the *Working Time* tab page to assign your production worker positions *(## Production Worker)* to the employee group *Active*, and to your new employee subgroup (##).

Continued on next page

Task 2:

Use the personnel action *Hiring HR305* to hire the new production worker to work in your personnel subarea.

1. Use the personnel number *305992##* (## = your group number), and the first of the current month as the hiring date. On the *Personnel Actions* screen, leave the fields *Personnel area, Employee group*, and *Employee subgroup* empty.
2. Use the structure search on the *Create Actions screen* (IT 0000) to search for the ## *Production Worker* position. See the path: *Org. Units HR Training Group → Training International → Production → Central Production*.
3. Choose *Enter*, before you save the *Actions* infotype. What happens?

   ____

   ____
4. Save the *Actions* infotype. Which data that you had not yet specified is defaulted on the next *Organizational Assignment* screen (infotype 0001)?

   ____

   Hint: After you have maintained and saved the entries in infotypes 0000 and 0001, STOP the hiring personnel action by selecting "Exit". When the system prompts you to do so, delimit the vacancy to the default date.

Task 3:

1. What IMG path do you follow to call the activity for integrating Organizational Management with Personnel Administration?

   ____

   ____

   Hint: Do not make any changes to the settings in Customizing.

Solution 16: Organizational Structure

Task 1:

Go into Organizational Management, and into the change mode for *Organization and Staffing*, and search for the organizational unit CABB. In the Training International area is the *Production* organizational unit, which contains the *Central Production* organizational unit, which in turn contains the ## *Production Worker* positions.

Select the position for your group number by double-clicking it, and edit the details for your position. Make sure that the start date under *Date and Preview Period* is set to the first of this month. You should also use this date as the hiring date for the second employee you hire.

1. Edit the *Account assignment* tab page to assign your production worker position *(## Production Worker)* to the company code *CABB*, the personnel area *PA##*, and your personnel subarea *Production (0004)*. Leave the remaining fields blank.

   a) *SAP Menu: Human Resources → Organizational Management → Organizational Structure → Organization and Staffing → Change*

   b) In the upper-left screen section, the *Search area,* search for the organizational unit CABB.

   c) The search result, the organizational unit CABB Training International, is displayed in the lower-left screen section, the *Selection area*. By double clicking the result, the structure of the Training International department is displayed in the upper-right screen section, the *Overview area*.

   d) Here you can use the *Date and Preview Period* button to change the start date to the first of the current month. Now choose *Execute*.

   e) Search for your position ## Production Worker using the following path:

      Training International → Production → Central Production

      Hint: Note that you are working in the *Staffing Plan (Structure)* view. (Choose *Goto* in the overview area in the upper-left section of the screen to change views).

   f) Double click your ## Production Worker position, which you can find in the subunit *Production*, to edit the details in the lower-right screen section, the *Detail area*.

   g) Enter the following on the *Account Assignment* tab page:

Continued on next page

h) Company code *CABB* and personnel area *PA##.* Select *Enter*. Now you can enter personnel subarea *0004.*

i) Save the data.

2. Edit the *Working Time* tab page to assign your production worker positions *(## Production Worker)* to the employee group *Active*, and to your new employee subgroup (##).

a) Choose the Work schedule tab page, and enter the following:

b) Employee group *Active* and employee subgroup ##.

c) Save your data and return to the initial screen.

Task 2:

Use the personnel action *Hiring HR305* to hire the new production worker to work in your personnel subarea.

1. Use the personnel number *305992##* (## = your group number), and the first of the current month as the hiring date. On the *Personnel Actions* screen, leave the fields *Personnel area, Employee group*, and *Employee subgroup* empty.

a) *Human Resources→ Personnel Management → Administration → HR Master Data*

b) Select *Personnel Actions*.

c) Select the *Hiring HR305* personnel action.

d) Enter personnel number *305992##* and the first of the month as the start date.

e) Choose Execute.

2. Use the structure search on the *Create Actions screen* (IT 0000) to search for the *## Production Worker* position. See the path: *Org. Units HR Training Group → Training International → Production → Central Production*.

a) Use the value help function for the Position field, and select the structure search as search help. The *## - Production Worker* position can be found in the production unit in the *Organizational Units Training Group.*

3. Choose *Enter*, before you save the *Actions* infotype. What happens?

____

Continued on next page

a) Note the system message “*Default values were copied from the position.*”

b) The employee group, employee subgroup, and personnel area fields were filled with the position's default values when you choose*Enter*.

4. Save the *Actions* infotype. Which data that you had not yet specified is defaulted on the next *Organizational Assignment* screen (infotype 0001)?

Hint: After you have maintained and saved the entries in infotypes 0000 and 0001, STOP the hiring personnel action by selecting “Exit”. When the system prompts you to do so, delimit the vacancy to the default date.

a) Choose *Save*. The next infotype appears in which following values are defaulted:

b) Subarea *0004* (added to position)

c) The contents of the other fields that are filled, such as Payroll area, Administrator group, or Organizational key, are controlled by features. This will be dealt with in subsequent units.

d) Save the data in this infotype and choose *Exit*.

Task 3:

1. What IMG path do you follow to call the activity for integrating Organizational Management with Personnel Administration?

Hint: Do not make any changes to the settings in Customizing.

a) *IMG: Personnel Management → Organizational Management → Integration → Integration with Personnel Administration → Set Up Integration with Personnel Administration*

Lesson Summary

You should now be able to:

- Map the organizational structure of your company in the SAP system
- Set up the link between the Organizational Structure and the Enterprise Structure.

Unit Summary

You should now be able to:

- Map the organizational structure of your company in the SAP system
- Set up the link between the Organizational Structure and the Enterprise Structure.

Unit 11

321

Additional Organizational Assignment

Further information can be found in the Instructor Guide in SAPNet.

Unit Overview

The important fields from the Organizational Assignment infotype are discussed in this unit. The meaning of fields and possible Customizing settings are also discussed here.

Unit Objectives

After completing this unit, you will be able to:

- Explain the meaning of payroll area and payroll control record
- Name important additional prerequisites for payroll
- Define the structure of the organizational key
- Store administrator responsible
- Save statistical information about the employees within a company

Unit Contents

Lesson: Payroll Area and Organizational Key

322

Lesson Duration: 30 Minutes

Lesson Overview

The terms Payroll Area and Organizational Key are discussed in this lesson.

Lesson Objectives

After completing this lesson, you will be able to:

- Explain the meaning of payroll area and payroll control record
- Name important additional prerequisites for payroll
- Define the structure of the organizational key

Further information can be found in the Instructor Guide in SAPNet.

Business Example

The structure of payroll areas and organizational keys should be reconsidered.

Additional Organizational Assignment of an Employee

Additional Organizational Assignment of an Employee

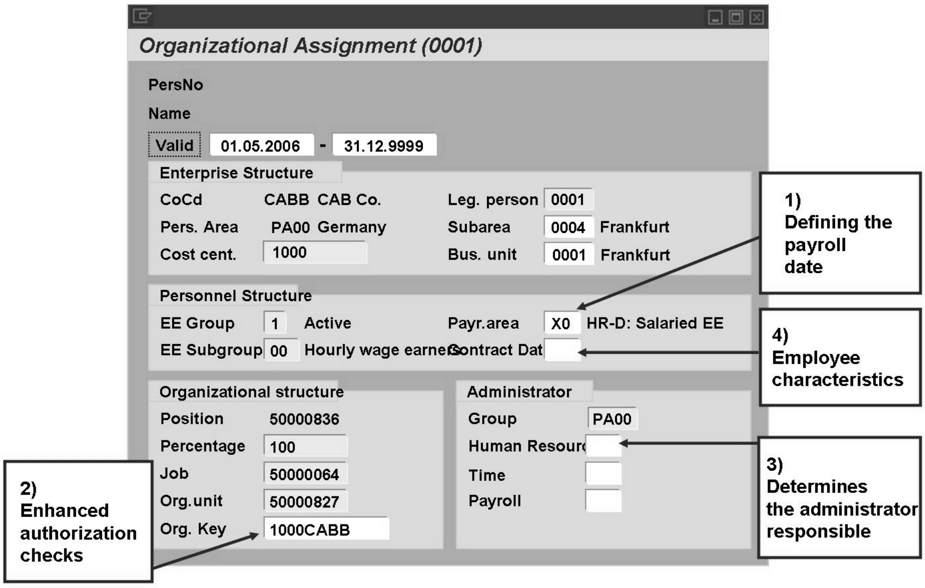


Figure 204: Additional Organizational Assignment of an Employee

You already know most of the indicators in the Organizational Assignment infotype (0001). This unit discusses the remaining indicators, such as the indicators for authorization checks and those that control payroll.

Payroll Area

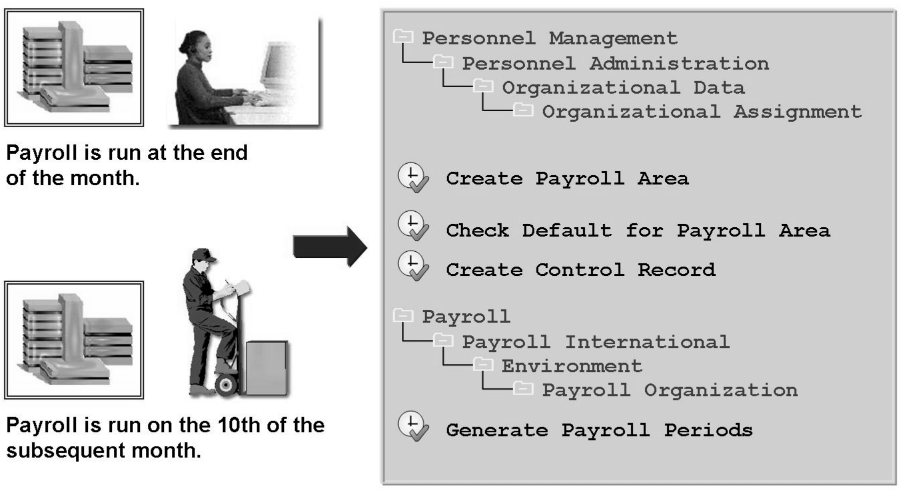


Figure 205: 1) Payroll Area

HCM uses the payroll areas to group together employees who should be processed by payroll on the same day, and to determine the precise date of the payroll. Employees belonging to different employee subgroups can belong to the same payroll area.

For example, if the company pays all of its salaried employees at the end of the month, and all of its hourly-paid employees on the tenth of the following month, then it would need at least two payroll areas.

On the right, you can see the Customizing steps that you need to set up payroll areas, control records, and payroll periods.

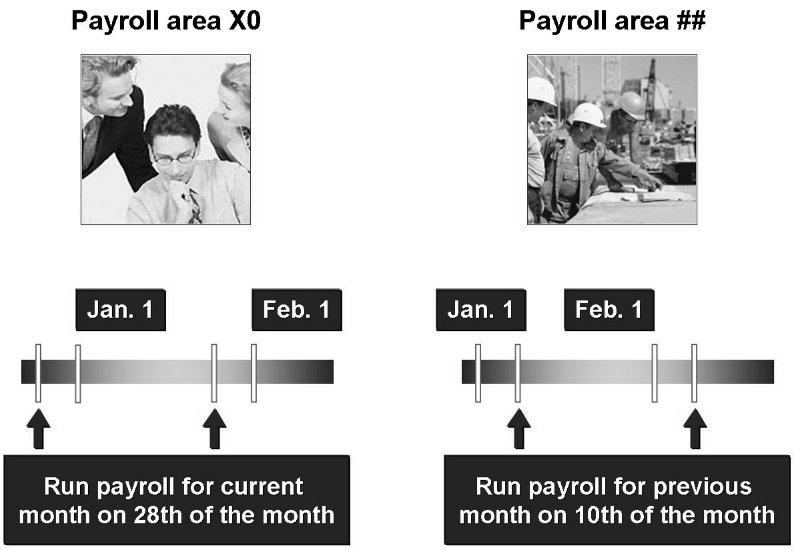


Figure 206: Payroll Organization

The payroll area is an organizational entity that groups employees together so that you can run payroll. You group employees in the same payroll area according to organizational assignment criteria. You should group all employees for whom you run payroll on the **same day** and in the **same frequency** (such as monthly).

The payroll area has two functions required for payroll:

- It groups the personnel numbers to be accounted in the same period.
- It defines the exact date of the payroll period.

Personnel numbers are assigned to payroll areas in the Organizational Assignment infotype (0001). The default value that appears in the Payr. Area field depends on the organizational assignment of the employee. (See the Defining Default Values - Features unit for more detailed information.)

Payroll Control Record

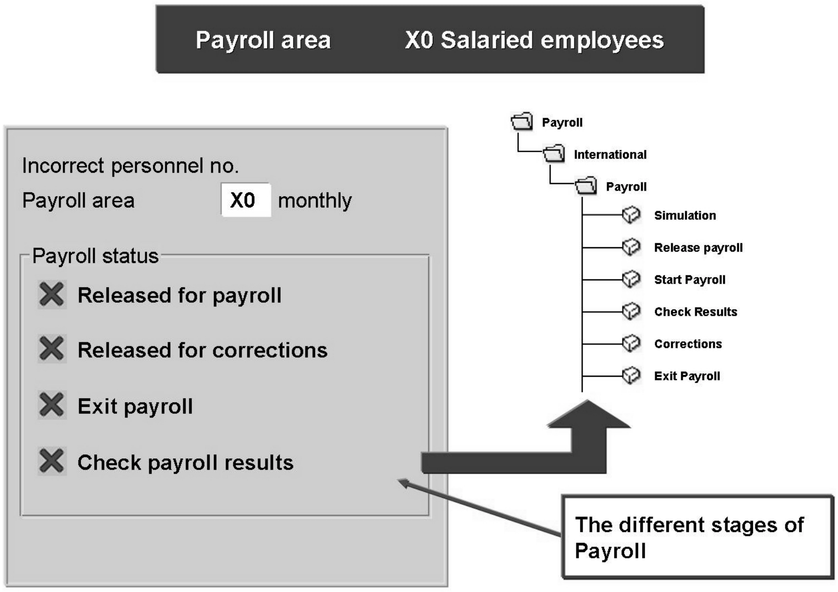


Figure 207: Payroll Control Record

You must create a control record for each payroll area.

The control record controls the individual payroll stages.

The control record:

- Determines the exact date of the current payroll period
- Defines the payroll past for retroactive payroll
- Locks master data and time data during the payroll run to prevent changes from being made. This lock is set for past payrolls and for the current one. You can still change payroll data in the future.
- Defines the earliest retroactive accounting period for the payroll area

The individual payroll stages are in the payroll menu option. You can start, check, correct, and exit payroll from this menu option.

Overview: Payroll Organization

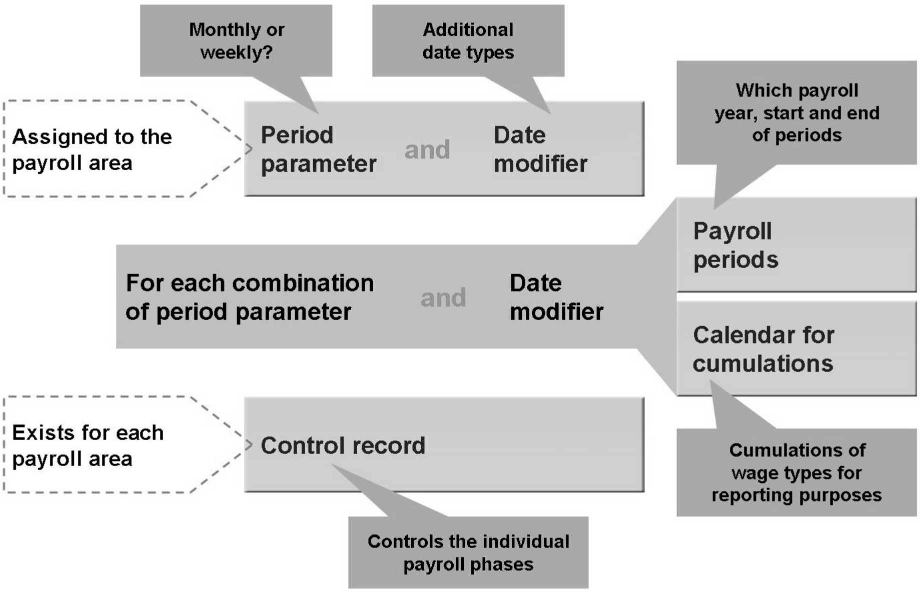


Figure 208: Overview - Payroll Organization

To be able to run payroll in the SAP system, you need to make certain basic Customizing settings:

- Each **payroll area** is assigned a **period parameter** and a **date modifier**. The date modifier is only relevant in some countries. The period parameter specifies whether payroll is run monthly, bimonthly, weekly, or every so many weeks. For this, each period parameter used is assigned to a time unit. The values for the time units are fixed (monthly, bimonthly, weekly, fortnightly, every four weeks, annually).
- You must generate **payroll periods** for each combination of period parameter and date modifier assigned to a payroll area. Depending on the period parameter, all periods in the time interval specified are determined. The system determines the start date and end date of each period and calculates the payday using a rule that is also to be specified as a parameter. Payroll year and payroll period define the specific payroll dates.
- You must create a **control record** for each payroll area. The control record controls the individual stages of payroll.

Set Up Using Customizing

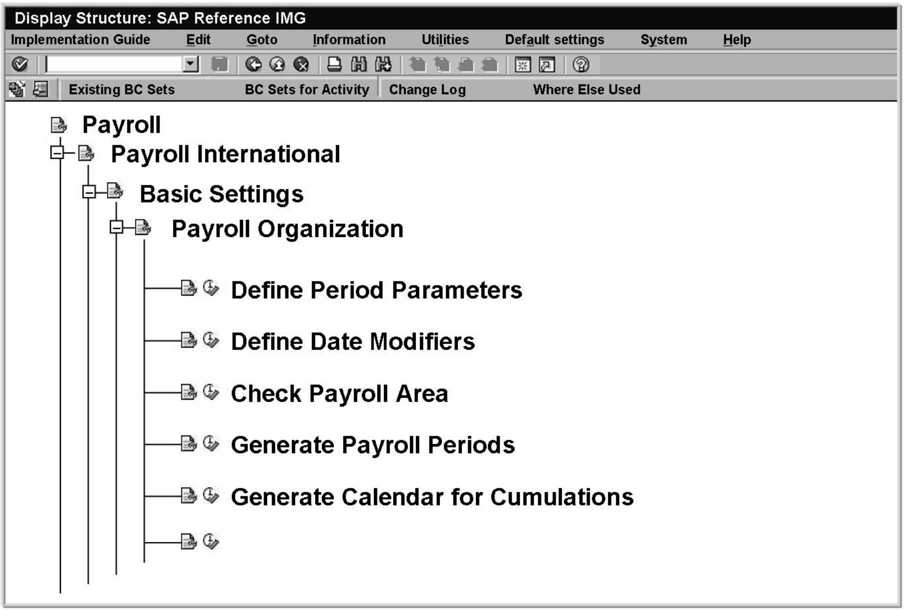


Figure 209: Set Up Using Customizing

The following section explains the administrative elements necessary for payroll such as payroll area, payroll period, payroll control record, and the payroll status of employees. The IMG steps can be found in Customizing Payroll for your appropriate country under *Basic Settings → Payroll Organization*

Payroll Periods

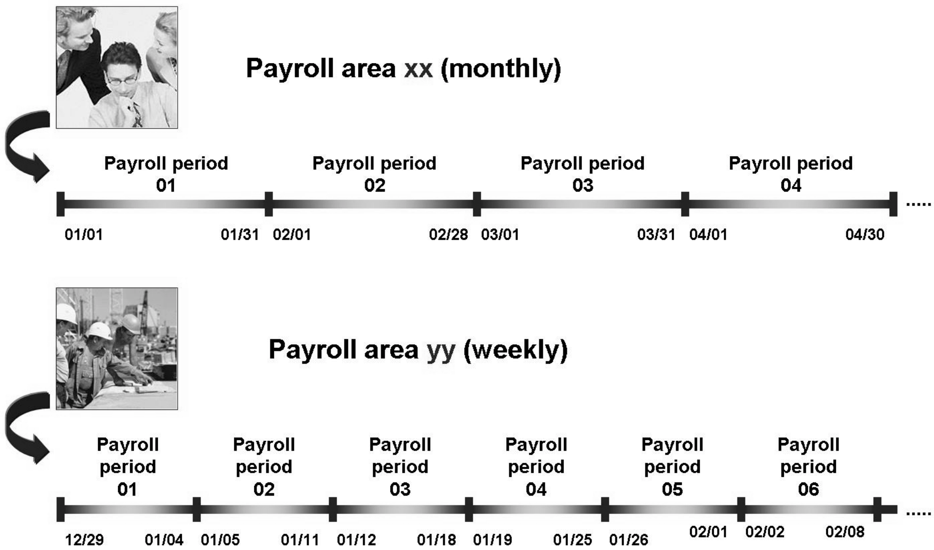


Figure 210: Payroll Periods

A **payroll period** determines the period in which a payroll result is generated. The duration of payroll periods can differ, for example, monthly, weekly, fortnightly.

You must specify for **payroll areas** the start date and end date of the periods to enable the specific payroll dates to be determined.

This data is automatically generated when you start a program. The following slides explain this in more detail.

Generation of Payroll Periods (1)

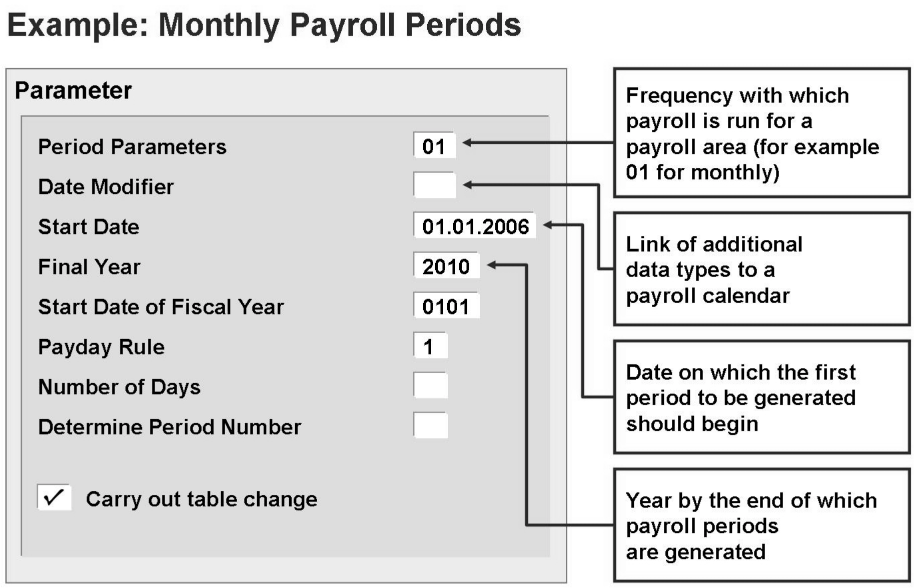


Figure 211: Generation of Payroll Periods (1)

You link payroll periods to time units that are appended to the corresponding period modifier in the IMG activity ***Generate Payroll Periods***. Here, you also specify how paydays are defined. Likewise, you can identify the start of the fiscal year.

In addition to the start date and end date of a period and of the payday, you can define a **date modifier** as an additional payroll-relevant date. This is a modifier you use to link additional date types to a payroll calendar. Besides the date specifications defined for the standard payroll interval, you can generate other date specifications for each period in the payroll calendar. You can use the other date specifications to store the payday, for example.

The example in the graphic shows how you generate payroll periods for a monthly period modifier. Here, the start date and end date of a period coincide with the start date and end date of a calendar month. You use these settings to generate payroll periods for 60 months (start date until end of final year).

Caution: The input screen of the report changes dynamically according to country grouping.

Generation of Payroll Periods (2)

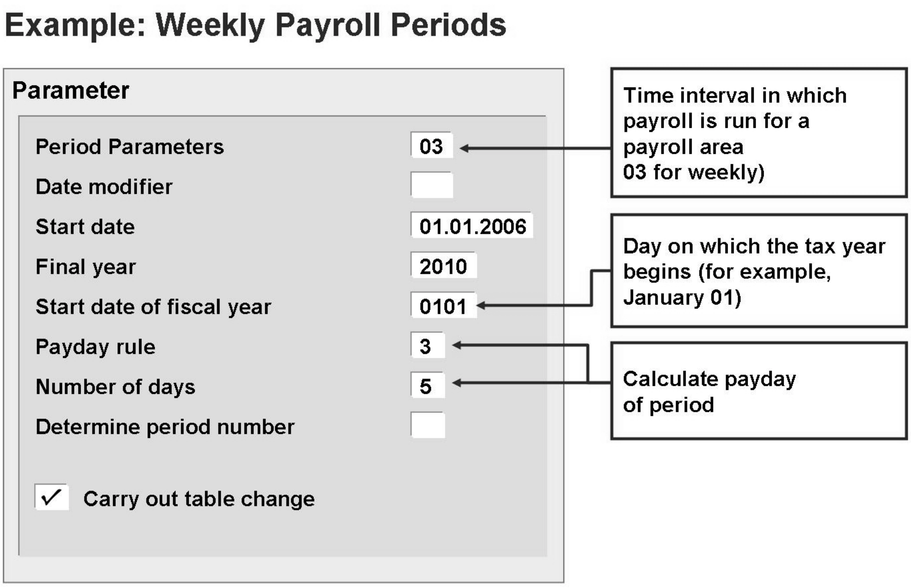


Figure 212: Generation of Payroll Periods (2)

Payday rule/Number of days: These fields determine how the payday of the period is calculated. The following values are possible for the payday rule:

1. The number of days is added to the start date of the period to calculate the payday
2. The number of days is deducted from the end date of the period
3. The number of days is added to the end date of the period
4. Valid for monthly payroll periods only: The number of days is used as the exact date.

Determine period number: In this field, you define the date of the payroll period the system uses to determine the period number. The system uses the period number in the payroll control record to continually project the payroll periods of a year. When counting the period numbers, the system starts again at one at the beginning of each fiscal year.

In the example in the graphic, you pay the employee for the previous week's work every Thursday (start date July 1, 2002: Sunday-Saturday period). The reason for this is that payday rule 3 specifies that the number of days (5) is added to the end date of the period.

Generating Calendar for Cumulations

Generating Calendar for Cumulations

Period	Year	Type	No.	Year
01	2006	M	01	2006
02	2006	M	02	2006
.				
.				
.				
01	2006	Q	01	2006
02	2006	$\boxed{Q}$	01	2006

Cumulation type:

M = monthly
Q = quarterly
X = biannually
Y = annually
U = unlimited

Figure 213: Generating Calendar for Cumulations

Certain countries require the calendar for reporting purposes.

Therefore, in payroll some wage types are cumulated over several periods to obtain, for example, monthly, quarterly, or annual totals. During calendar generation, each payroll period is assigned to a quarter, half year, or year.

You must generate the calendar for each combination of period parameter and date modifier that is assigned at a lower level to a payroll area.

You generate this cumulation calendar for several years in advance using a report in Customizing.

Organizational Key

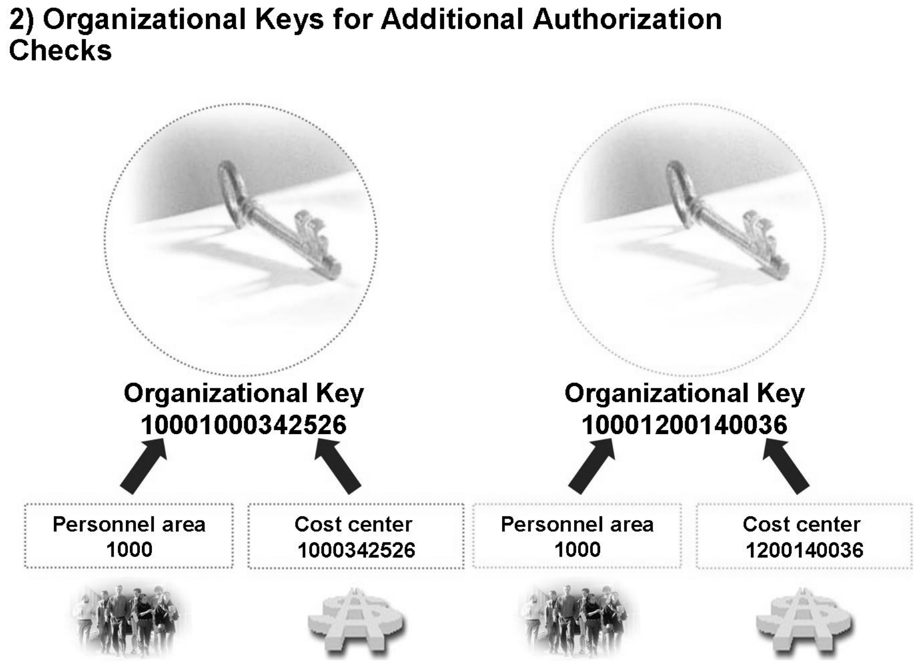


Figure 214: 2) Organizational Keys for Additional Authorization Checks

You can use the organizational key to enhance the authorization checks in conjunction with the HCM master data authorization object (see the course: HR940 Authorizations in HCM).

The organizational key is a 14-character field in the Organizational Assignment infotype (0001) that you can structure according to your own requirements. You can set it up using specific control and rule tables. Do not confuse the organizational key with the organizational unit.

In the IMG, choose *Personnel Management → Personnel Administration → Organizational Data → Organizational Assignment → Set Up Organizational Key.*.

333

Exercise 17: Payroll Area and Organizational Key

Exercise Duration: 10 Minutes

Exercise Objectives

After completing this exercise, you will be able to:

- Create payroll areas and display a payroll control record

Business Example

Since your company has various payroll dates, you should create a payroll area. In addition, you want to find out about the status of a payroll control record.

Task:

Do the following exercises:

1. Create a payroll area for a productive monthly payroll with the key ##. The name should contain your group number.
2. Display the payroll control record for payroll area *50*.

   What is the current period of this payroll area?

   ____

   What is the earliest retroactive accounting period according to the control record?

   ____
3. What IMG path do you follow to define an organizational key?

Solution 17: Payroll Area and Organizational Key

Task:

Do the following exercises:

1. Create a payroll area for a productive monthly payroll with the key ##. The name should contain your group number.

   a) *IMG path: Personnel Management → Personnel Administration → Organizational Data → Organizational Assignment → Create Payroll Area*

   b) Create a new entry in the table: choose *New Entries*

Payroll area:	##
Payroll area text:	Name containing your group number ##
Period parameters:	01
Deduct:	Active
Date modifier:	Leave empty

2. Display the payroll control record for payroll area *50*.

   What is the current period of this payroll area?

   ____

   What is the earliest retroactive accounting period according to the control record?

   ____

   a) IMG path: *Personnel Management → Personnel Administration → Organizational Data → Organizational Assignment → Create Control Record*

   b) Payroll area: 50

   c) Choose Change or Display

   d) December 2002

   e) until December 2002

3. What IMG path do you follow to define an organizational key?

   a) IMG path: *Personnel Management → Personnel Administration → Organizational Data → Organizational Assignment → Create Organizational Key*

Lesson Summary

You should now be able to:

- Explain the meaning of payroll area and payroll control record
- Name important additional prerequisites for payroll
- Define the structure of the organizational key

Lesson: Administrator Responsible and Employee Attributes

336 Lesson Duration: 25 Minutes

Lesson Overview

The administrators responsible are assigned to certain administrator groups in Customizing and then stored in the Organizational Assignment infotype for the employee.

Additional data is recorded for an employee for statistical reasons.

Lesson Objectives

After completing this lesson, you will be able to:

- Store administrator responsible
- Save statistical information about the employees within a company

Further information can be found in the Instructor Guide in SAPNet.

Business Example

New administrator groups should be created with new administrators in your company.

You should become acquainted with the options for saving statistical information for your employees.

Administrator Responsible in Personnel Administration

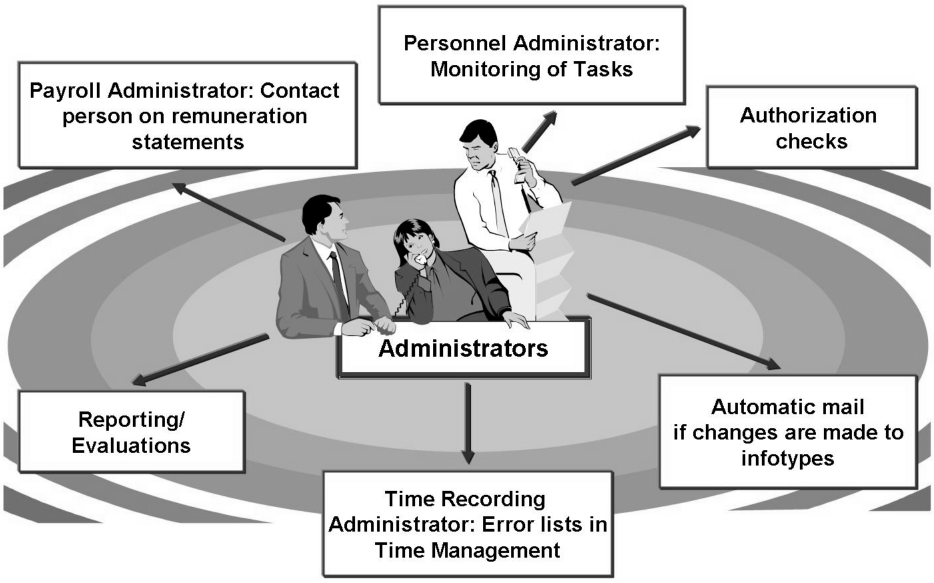
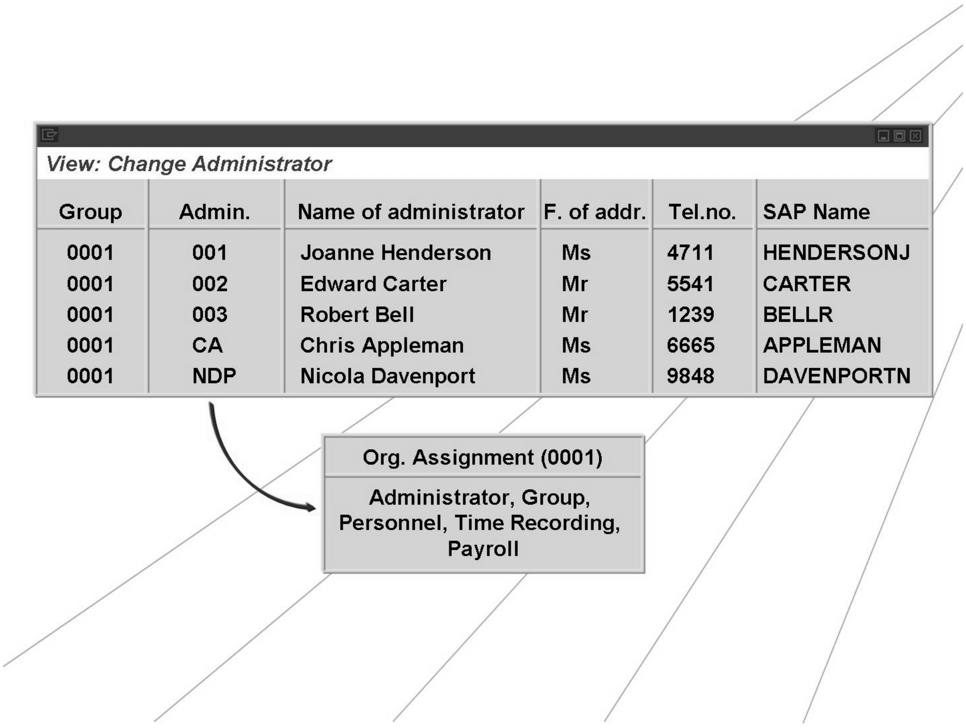


Figure 215: 3) Administrator Responsible for Personnel Administration

In the Organizational Assignment infotype (0001), you can enter three different administrators: personnel administrator, time administrator, and payroll administrator. Examples of use:

- The administrator (in this instance, the "time administrator") can use standard SAP reports as a selection criterion. This would ensure that the time administrator only creates a list of his or her employees.
- You can print the administrator on the remuneration statement so that employees know who to contact in case of queries.

You can call the relevant Customizing step to create administrator groups and administrators under *Personnel Management → Personnel Administration → Organizational Data → Organizational Assignment → Define administrator*. With the call *Define Administrator Groups*, you call the characteristic PINCH that determines the administrator group in the infotype *Organizational Assignment* (see the chapter Define Default Values - Characteristics).



Group	Admin.	Name of administrator	F. of addr.	Tel.no.	SAP Name
0001	001	Joanne Henderson	Ms	4711	HENDERSONJ
0001	002	Edward Carter	Mr	5541	CARTER
0001	003	Robert Bell	Mr	1239	BELLR
0001	CA	Chris Appleman	Ms	6665	APPLEMAN
0001	NDP	Nicola Davenport	Ms	9848	DAVENPORTN

Figure 216: Administrator Assignment

During Customizing, you enter the administrator for each administrator group. These are the administrators that you want to enter in the Organizational Assignment infotype.

The administrator table stores the administrator's name, form of address, and telephone number centrally. In addition, you can enter the SAP names (that is, the administrator's SAP user). You can use this name to trigger an automatic message (e-mail) that is sent to the administrator responsible when users make changes to infotype records.

Employee Attributes

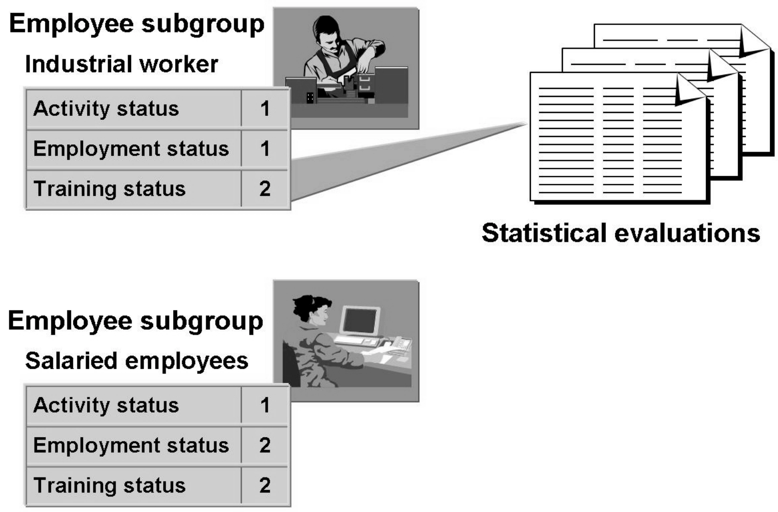


Figure 217: 4) Employee Attributes

You have defined your employee groups and subgroups in your personnel structure. You must now assign a status value to the employee subgroups. This can be an activity status, an employment status, or a training status. In several countries, this information is sent from the State Statistics Office. You store this information in the Customizing step *Personnel Management → Personnel Administration → Organizational Data → Organizational Assignment → Employee Attributes*.

- The possible entries for activity status, are:
  - 1 = Active
  - 2.=Retiree
  - 3 = Early retiree
  - 9 = Other
- Possible entries for the employment status, are:
  - 1 = Industrial worker
  - 2 = Salaried Employee
  - 3 = Clerk
  - 9 = Other
- Possible entries for the employment status, are:
  - 1 = Trainee/apprentice
  - 2 = Trained
  - 9 = Other

The existing values are transferred from the copy template when you copy the employee subgroup using the entity copier.

If necessary, you can specify additional differentiation in the employee statuses of your employees so they are not dependent on the employee subgroup assignments, but are created in the *Terms of Employment* field of the →Organizational Assignment→ infotype. To do so, choose the following in the IMG: *Personnel Management → Personnel Administration → Organizational Data → Organizational Assignment → Define Terms of Employment*.

National and international evaluations use these statuses to select and summarize personal data, or to represent national features.

341

Exercise 18: Administrator Responsible and Employee Attributes

Exercise Duration: 10 Minutes

Exercise Objectives

After completing this exercise, you will be able to:

- Create administrators to assign to your employees

Business Example

The relevant administrator must be informed of employee changes in your company. You are an administrator and must be informed about changes to employee data.

Task 1:

Do the following exercises:

1. Define an administrator for your administrator group (PA##). Use the correct IMG step under *Organizational Assignment:*

   Use your personnel area abbreviation ***PA##*** as the name for your administrator group, and use ***A##*** as the three-character administrator ID. In the *SAP Name* field, enter your logon ID. This ensures that you receive an e-mail if changes are made to the administrator data.

2. Update the master records for the employee who you have already started to hire (personnel number *305992##*):

   Enter the administrator for personnel ***A##*** in the *Organizational Assignment* infotype. Save the data in this infotype and end the hiring action (the other infotypes are processed in the following units).

3. Check the e-mail informing you of a change in your mail inbox. This mail was sent to you as you are entered as the administrator.

Task 2:

The following exercises are OPTIONAL:

1. Call the table for maintaining employee attributes. Which employee characteristics are assigned to your employee subgroup ##? Use the F1 help to find out the meaning of the entries:

   Activity Status: ____

   Employment status ____

Continued on next page

Training status: ______________________________________

Why do values already exist here?

____

____

Solution 18: Administrator Responsible and Employee Attributes

Task 1:

Do the following exercises:

1. Define an administrator for your administrator group (PA##). Use the correct IMG step under *Organizational Assignment:*

   Use your personnel area abbreviation ***PA##*** as the name for your administrator group, and use ***A##*** as the three-character administrator ID. In the *SAP Name* field, enter your logon ID. This ensures that you receive an e-mail if changes are made to the administrator data.

   a) IMG path: *Personnel Management → Personnel Administration → Organizational Data → Organizational Assignment → Define administrator*

   b) Select *New Entries*.

   c) Enter the group ***PA##***, administrator ***A##***, administrator's name: ***Admin.group ##***, a form of address and telephone number of your choice, and your SAP name ***HR305-##***.

   d) Save your data and return to the IMG.

2. Update the master records for the employee who you have already started to hire (personnel number *305992##*):

Continued on next page

Enter the administrator for personnel ***A##*** in the *Organizational Assignment* infotype. Save the data in this infotype and end the hiring action (the other infotypes are processed in the following units).

a) *Human Resources→ Personnel Management → Administration → HR Master Data*

b) Select *Personnel Actions*.

c) Enter the personnel number *305992##.*

d) Select *Hiring HR305*.

e) Choose *Execute*.

f) Choose *Execute infogroup* to restart the hiring action.

g) Select *Next record* until you get to the *Change Organizational Assignment (infotype 0001)* screen.

h) Enter ***A##*** in the PersAdmin field.

i) Save the data and leave the hiring personnel action by choosing *Exit* or *Cancel*.

j) Return to the SAP Easy Access menu.

3. Check the e-mail informing you of a change in your mail inbox. This mail was sent to you as you are entered as the administrator.

   a) *Office → Work place → Inbox*

   b) Select *Unread Documents*.

   c) Check the document *Change to Personnel Administrator for ...*

   d) “Personnel administrator PA## A## is responsible for employee 305992## from DD.MM.YYYY. Previously this was the responsibility of the personnel administrator ....”

   e) Return to the SAP Easy Access menu.

Task 2:

The following exercises are OPTIONAL:

1. Call the table for maintaining employee attributes. Which employee characteristics are assigned to your employee subgroup ##? Use the F1 help to find out the meaning of the entries:

   Activity Status: ____

   Employment status ____

   Training status: ____

Continued on next page

Why do values already exist here?

____

____

a) IMG path: *Personnel Management → Personnel Administration → Organizational Data → Organizational Assignment → Define Employee Attributes*

b) Activity status 1 = Active

c) Employment status 1 = Industrial worker

d) Training status 2 = Trained

e) Why do values already exist here?

f) The values are also transferred when the entity copier copies the employee subgroup.

Lesson Summary

You should now be able to:

- Store administrator responsible
- Save statistical information about the employees within a company

Unit Summary

You should now be able to:

- Explain the meaning of payroll area and payroll control record
- Name important additional prerequisites for payroll
- Define the structure of the organizational key
- Store administrator responsible
- Save statistical information about the employees within a company

Unit 12

349 Defining Default Values – Features

Further information can be found in the Instructor Guide in SAPNet.

Unit Overview

To begin with, we explain the meaning of features and their functions. This is followed by exercises in which the features ABKRS, PINCH and NUMKR have to be changed.

Unit Objectives

After completing this unit, you will be able to:

- Control the default values using features in the system.

Unit Contents

Lesson: Defining Default Values – Features

350

Lesson Duration: 65 Minutes

Lesson Overview

Function and Advantages of Features

Maintaining features, which define default values for:

1. Payroll area
2. Administrator group
3. Number range intervals

Lesson Objectives

After completing this lesson, you will be able to:

- Control the default values using features in the system.

Further information can be found in the Instructor Guide in SAPNet.

Business Example

Tp prevent personnel administrators having to enter all the master data manually, you can define default values that are then automatically proposed by the system.

Default Values

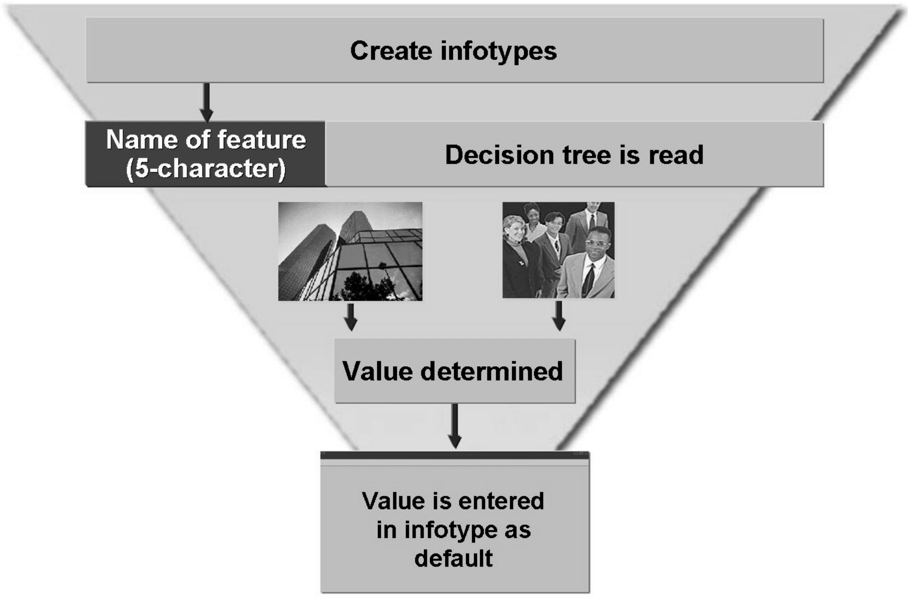


Figure 218: Default Values

The system often uses features to determine default values. The system suggests these values when you maintain infotypes that affect employee master data.

For example, the ABKRS feature determines default values for the payroll area. It does this using the data found in the employee's Organizational Assignment infotype record. Another example is the LGMST feature. This feature defaults the wage types permitted for an employee in the Basic Pay infotype. This feature is discussed in the unit on the wage type structure.

Maintaining Features

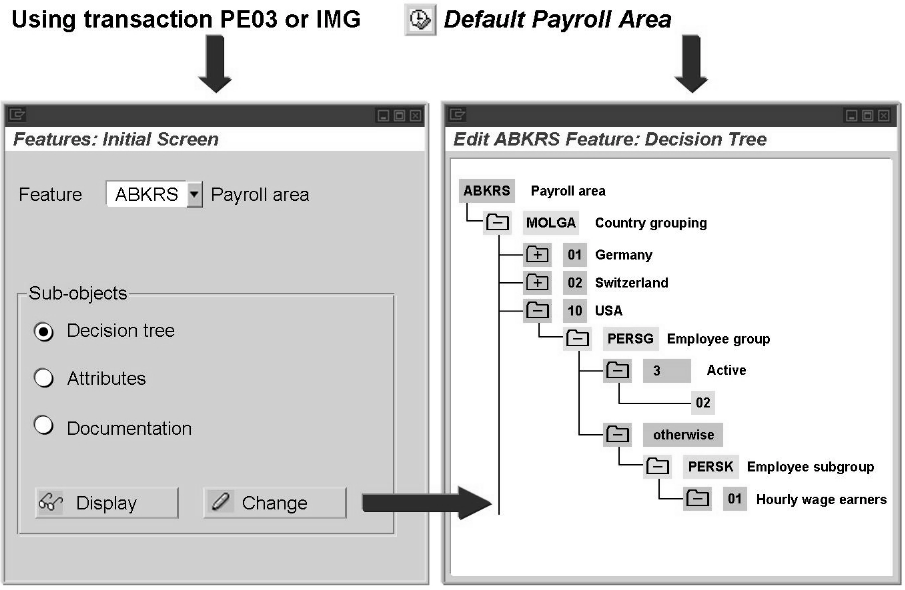


Figure 219: Maintaining Features (1)

There are two ways to maintain features:

- You can access the feature decision tree from the Payroll or Time Management IMG (implementation guide) and then make your changes. The system always displays the feature assigned to the IMG module.
- You can also use the feature maintenance transaction, PE03. The "Features: Initial Screen" appears.

Decision trees can be simple or very complex. This depends on their function and on the number of fields, operations, and decision criteria they contain.

Report RPUMKG00 activates features.

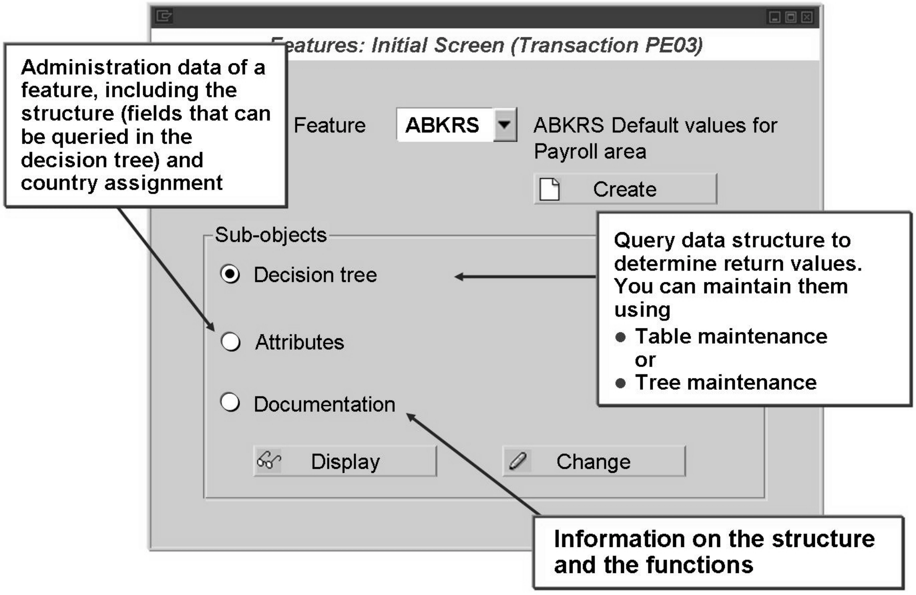


Figure 220: Maintaining Features (2)

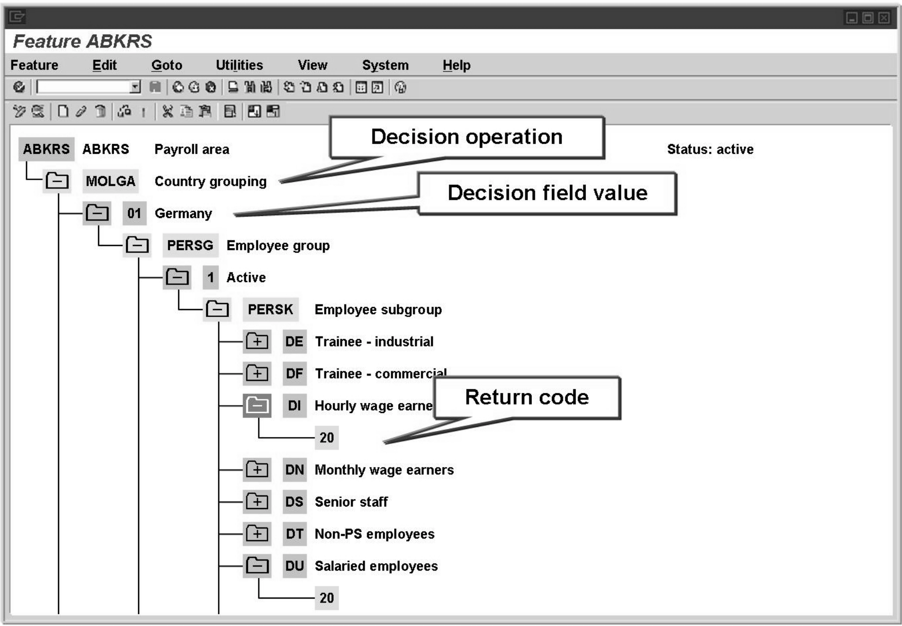


Figure 221: Maintaining Features (3)

Features are objects that query different personnel or data structure fields to determine a certain return code or result. The system uses this value to define defaults and to control certain system processes. Features can therefore enhance system flexibility.

You can use features for different purposes. The most important applications are:

- Features that define default values

  The system often uses features to determine default values. The system suggests these values when you maintain infotypes that affect employee master data. The feature either delivers a default value directly - this is then written to the relevant infotype field (for example, the ABKRS feature -> Organizational Assignment (infotype 0001)), or the feature delivers a key entry as a return code, which the system can use to read one or more tables. The system takes the stored default values from these tables and enters them in the relevant infotype, for example, Feature LGMST -> Basic Pay (infotype 0008).

  Hint: The system always reads these default values when you create an infotype.

- Features that control system processes

  The feature Pnnnn (nnnn stands for the infotype number) controls the sequence in which the system displays country-specific screens when you maintain or display master data infotypes.

- Features that automatically generate mail messages

  Some features automatically generate mail messages when you change certain master data fields, for example, the various administrators in infotype Organizational Assignment (0001). Example: feature M0001.

Feature ABKRS

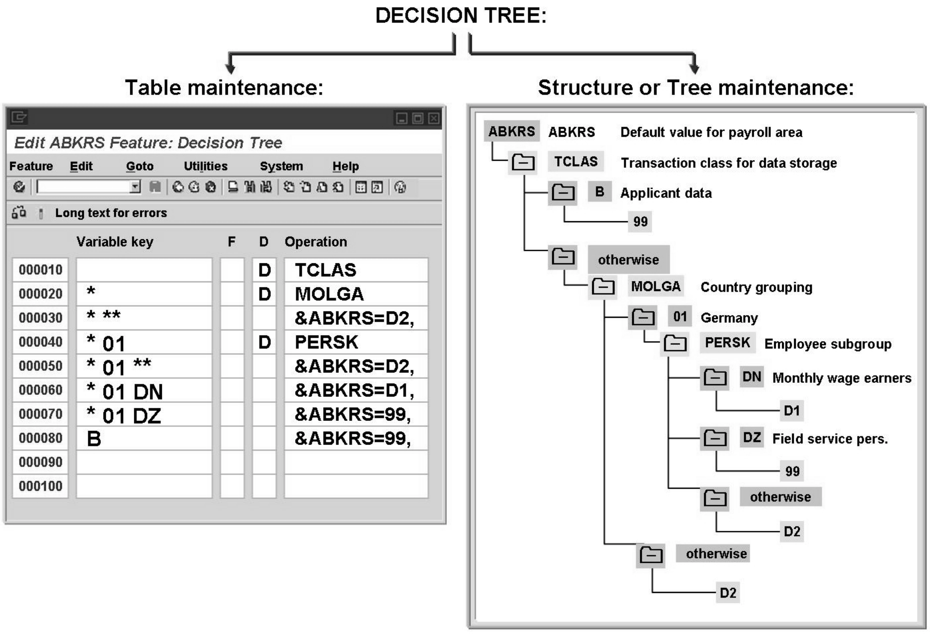


Figure 222: 1) Default for Payroll Area

Here, you can define default values for payroll areas for your employees. The system defaults the payroll area when you maintain the master data in the Organizational Assignment infotype (0001).

In the standard SAP system, the payroll area depends on the country grouping, the employee group, and the employee subgroup. The system stores this data combination as a feature. This feature depicts a rule in a decision tree.

The system arranges the decision rule in the feature according to the following organizational data:

- Transaction class for data storage (TCLAS)

  A = Administration

  B = Recruitment

- Country grouping (MOLGA)
- Employee subgroup (PERSK)

For example, the feature would suggest payroll area 99 for employee subgroup DZ. This applies to the country grouping 01 (Germany). The system suggests this value as a default value in infotype 0001.

The value assignment in the table view appears as &Feature=Return code.

Feature PINCH

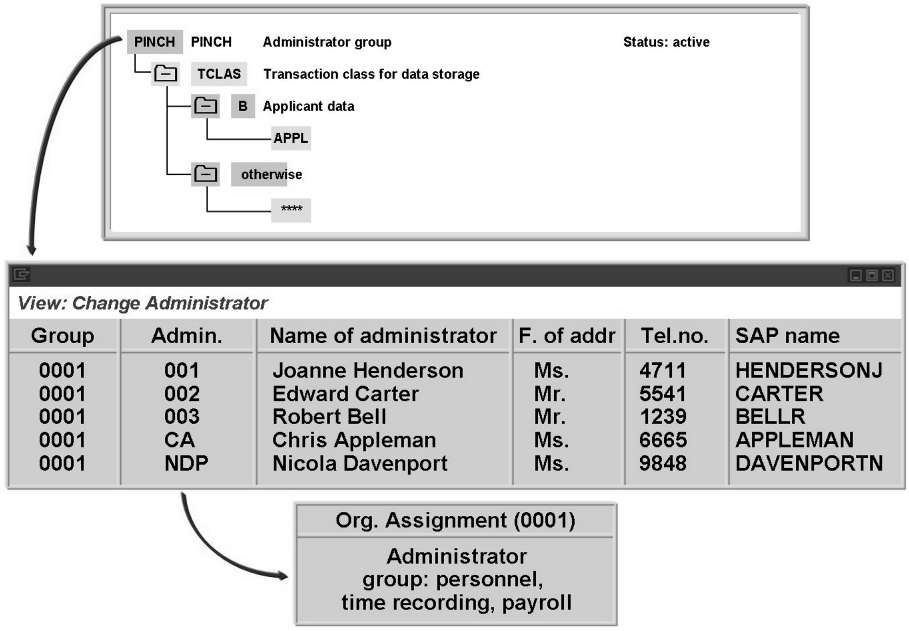


Figure 223: 2) Default for Administrator Groups

The PINCH feature determines an administrator group that is stored in the *Organizational Assignment* infotype.

You can assign administrators to an administrator group as follows:

- Store the return code of the feature in the Group field.
- Assign a three-character ID to each administrator.
- Determine your administrator's name, form of address, telephone number and user name (mail system).

If the return value of the PINCH feature is four asterisks (****), the system uses the name of the personnel area to which the employee is assigned in the “Organizational Assignment infotype (0001)” as the name of the administrator group.

You can select the administrators stored in the system that belong to the default administrator group. To do so, choose the F4 help in the relevant field in the Organizational Assignment infotype.

Feature NUMKR

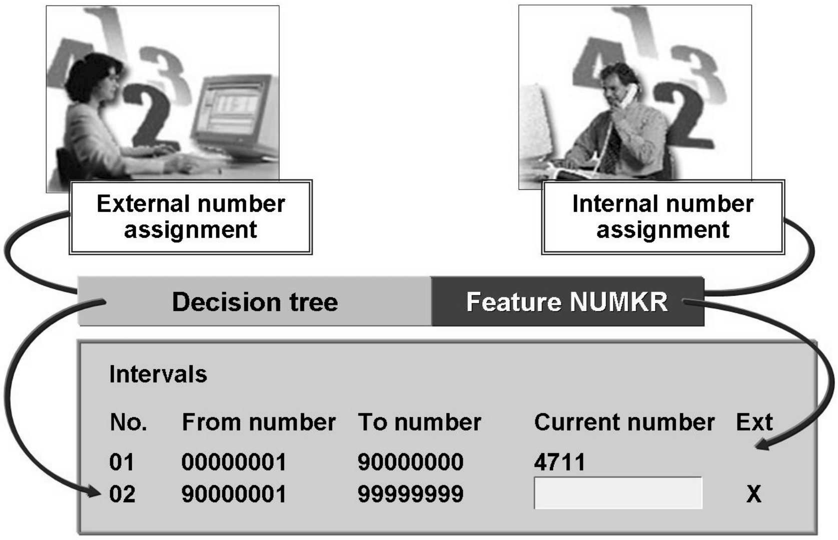


Figure 224: 3) Default for Number Range Intervals

You can also use a feature (NUMKR) to assign personnel numbers. This is also based on the organizational assignment.

There are two ways to assign a number range:

- Internal number assignment: In this instance, the SAP system assigns the personnel numbers.
- External number assignment: In this instance, the user assigns the personnel numbers.

SAP recommends that you use the internal number assignment function. Matchcodes can use any criteria to search HR master records, and for this reason you do not need “meaningful” personnel numbers. This is also advantageous when you transfer or promote employees as it means that any “meaning” you may have assigned to a personnel number cannot be lost.

You can have several number range intervals.

357

Exercise 19: Defining Default Values – Features

Exercise Duration: 15 Minutes

Exercise Objectives

After completing this exercise, you will be able to:

- Reduce data entry in master data by using features to define default values

Business Example

Previously, an administrator group for each personnel area was sufficient. However, your company is now growing so quickly that you need different administrator groups for individual employee subareas.

Task 1:

1. Return to IMG step *Define Administrator*, and copy the entry you made in the last exercise (with administrator group PA##). Use this entry to create an administrator group with the identification SG##.

Task 2:

In the IMG, find the step *Define Administrator Groups*, in which you will find the PINCH feature.

Open the "otherwise transaction class" and the query for personnel area.

1. First consider, using the **logic for personnel area PA31**, which entries you would have to make to achieve the following:

   If an employee works in production, administrator group SG31 should be defaulted. For all other employees, administrator group PA31 should be defaulted.

   What entries do you have to make?

   Then compare your solution with the solution that is already defined in your personnel area PA##.

2. Also create the solution you found for your own personnel area PA## for personnel area PA31.

   Check the feature tree for errors.

   Save but do NOT activate the feature yet.

Continued on next page

Task 3:

Call the *Organizational Assignment infotype* (0001) again for your employee within the HR305 hiring action. Make a note of the default values:

1. Defaulted administrator group: __________
   Personnel administrator: __________
   Save the infotype and end the hiring action.

Task 4:

1. What is the central transaction for calling feature maintenance?

Task 5:

1. What is the feature that defaults the payroll area in infotype 1 called?

2. What is the feature called that defaults the number range for the personnel number assignment?

Solution 19: Defining Default Values – Features

Task 1:

1. Return to IMG step *Define Administrator*, and copy the entry you made in the last exercise (with administrator group PA##). Use this entry to create an administrator group with the identification SG##.

   Answer: *IMG path: Personnel Management → Personnel Administration → Organizational Data → Organizational Assignment → Determine Administrator*

   Select the entry with administrator group “PA##”, administrator “A##”, and your SAP user name “HR305-##”.

   Choose *Copy as*. Overwrite the group “PA##” with “SG##”, and then choose *Copy* and *Save*.

   Save your data and return to the IMG.

Task 2:

In the IMG, find the step *Define Administrator Groups*, in which you will find the PINCH feature.

Open the “otherwise transaction class” and the query for personnel area.

1. First consider, using the **logic for personnel area PA31**, which entries you would have to make to achieve the following:

   If an employee works in production, administrator group SG31 should be defaulted. For all other employees, administrator group PA31 should be defaulted.

   What entries do you have to make?

   Then compare your solution with the solution that is already defined in your personnel area PA##.

   Answer: *IMG: Personnel Management → Personnel Administration → Organizational Data → Organizational Assignment → Determine Administrator Groups*

   - A new query after the personnel subarea
   - If the personnel subarea = 0004, the return value should be SG31
   - Otherwise, the return value should be “PA31” or “****”.

2. Also create the solution you found for your own personnel area PA## for personnel area PA31.

Continued on next page

Check the feature tree for errors.

Save but do NOT activate the feature yet.

a) To change the “PINCH” feature, proceed as follows:

b) Search for personnel area (WERKS) PA31 under transaction class (TCLAS) “otherwise”.

c) Position your cursor on *PA31* on the return value “****”, and choose *Delete*. Confirm the *Delete node/sub-tree* dialog box by choosing “Yes”.

d) Position the cursor on the *PA31* node and select the function *Create nodes*. The *Otherwise: Choose node type for new nodes* dialog box appears. Set the *Field for decision operation* indicator and confirm by choosing Enter.

e) In the *Field selection for decision operation* dialog box, select the *BTRTL Personnel subarea* field, and confirm with *Transfer*.

f) Position your cursor on the newly created *BTRTL* node and perform the *Create* function.

g) The *Personnel subarea* dialog box appears. Here, select *Personnel subarea 0004 in personnel area PA31*, and confirm with *Enter*.

h) Position your cursor on the *0004* node and choose *Create*. In the subsequent dialog box that appears, confirm the *Return value* default setting with *Enter*.

i) The system displays the *Return value for field value 0004* dialog box. Here, enter the value “SG31”, and choose *Transfer*.

j) Position your cursor on the *otherwise* node and choose *Create*. In the subsequent dialog box that appears, confirm the *Return value* default setting with *Enter*.

k) The system displays the *Return value for field value otherwise* dialog box. Here, enter the value “****”, and choose *Transfer*. This ensures that administrator group PA31 is the default for all other personnel subareas of personnel area PA31.

l) After you have changed the “PINCH” feature, choose the *Check* feature function. The system should display the message “Decision tree is error-free”.

m) **Save but do NOT activate the feature yet.**

Continued on next page

Task 3:

Call the *Organizational Assignment infotype* (0001) again for your employee within the HR305 hiring action. Make a note of the default values:

1. Defaulted administrator group: __________

   Personnel administrator: __________

   Save the infotype and end the hiring action.

   Answer: SG##

   A##

   Proceed as follows:

   Human Resources→ Personnel Management → Administration → HR Master Data

   Choose *Personnel Actions*. Enter the personnel number “305992##”.

   Select the *Hiring HR305* personnel action.

   Choose *Execute*.

   Choose Execute *infogroup* to restart the hiring action.

   Choose *Next record* until you reach the *Organizational Assignment* infotype (0001).

   Use the possible entries function for the *Personnel*, *Time Recording*, and *Payroll* administrator fields.

   Save the infotype and end the hiring action.

   Choose *Save* and leave the hiring personnel action by selecting *Exit*.

   Return to the SAP Easy Access menu.

Task 4:

1. What is the central transaction for calling feature maintenance?

   Answer: *PE03*

Task 5:

1. What is the feature that defaults the payroll area in infotype 1 called?

   Answer: *ABKRS*

2. What is the feature called that defaults the number range for the personnel number assignment?

   Answer: *NUMKR*

Lesson Summary

You should now be able to:

- Control the default values using features in the system.

Unit Summary

You should now be able to:

- Control the default values using features in the system.

Unit 13

365

Personal Data

Further information can be found in the Instructor Guide in SAPNet.

Unit Overview

The Personal Data, Addresses, and Bank Details infotypes are discussed in this section. This occurs within the context of a hiring action, whereby the most important Customizing settings are also discussed.

Unit Objectives

After completing this unit, you will be able to:

- Review personal data of an employee.

Unit Contents

Lesson: Personal Data

366

Lesson Duration: 25 Minutes

Lesson Overview

Infotypes

1. Personal Data
2. Addresses
3. Bank Details

Lesson Objectives

After completing this lesson, you will be able to:

- Review personal data of an employee.

Further information can be found in the Instructor Guide in SAPNet.

Business Example

An employee's personal data is stored in pre-defined infotypes.

Company-specific modifications may also be necessary in Customizing.

Personal Data

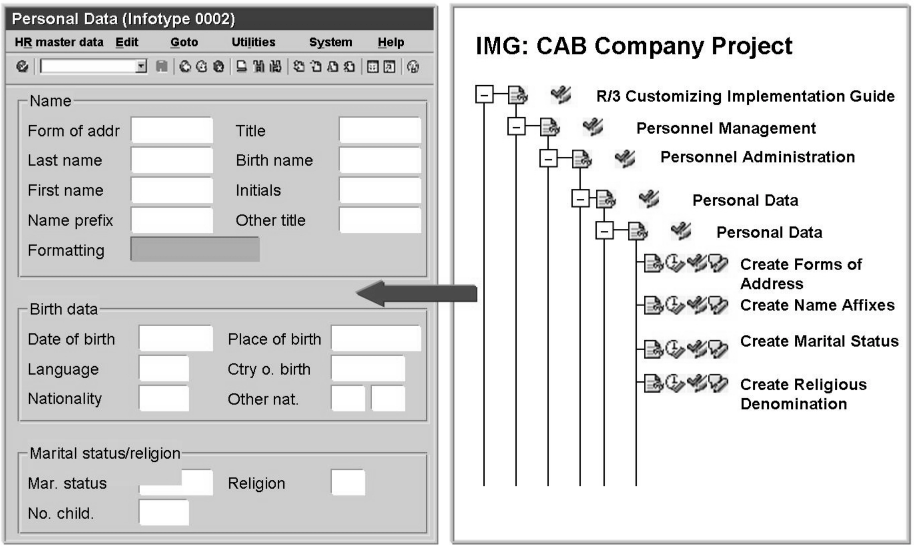


Figure 225: 1) Personal Data

In the first data group, enter all the data regarding the employee's name. This includes the form of address, the last and first name, any second names or birth names, as well as the title, and the initials. You should also enter details of any academic titles, prefixes, and affixes that the employee may have.

Birth data:
This data group consists of the employee's date and place of birth, as well as the nationality and language.

Marital status/religion:
The third data group contains data such as the number of children, the employee's marital status, and in some countries, the employee's religion.

You do not have to enter the employee's family members into the system, therefore, the system does not check to see that the number of children entered in the Personal Data infotype is the same as the actual number entered in the Family infotype (0021).

Addresses

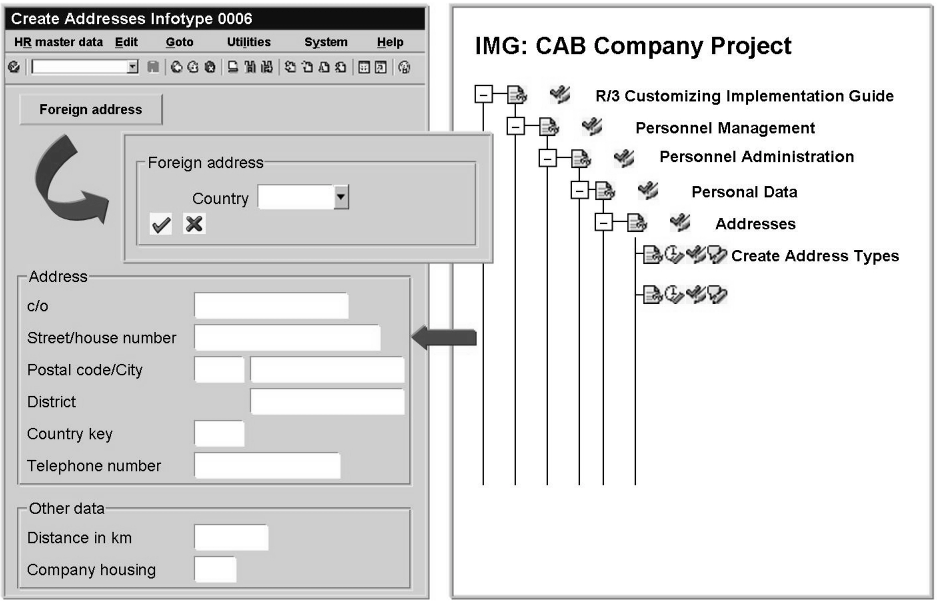


Figure 226: 2) Addresses

Foreign addresses:
The different country versions have their own entry screens for the Addresses infotype (0006). When you create an address, the system chooses the country entry screen that corresponds to the country of the personnel area to which the employee is assigned in the Organizational Assignment infotype (0001).

If you want to use a different country screen to the one suggested by the system, use the *Foreign address* function to choose a different screen. You can find this function on the entry screen for the Addresses infotype.

Bank Details

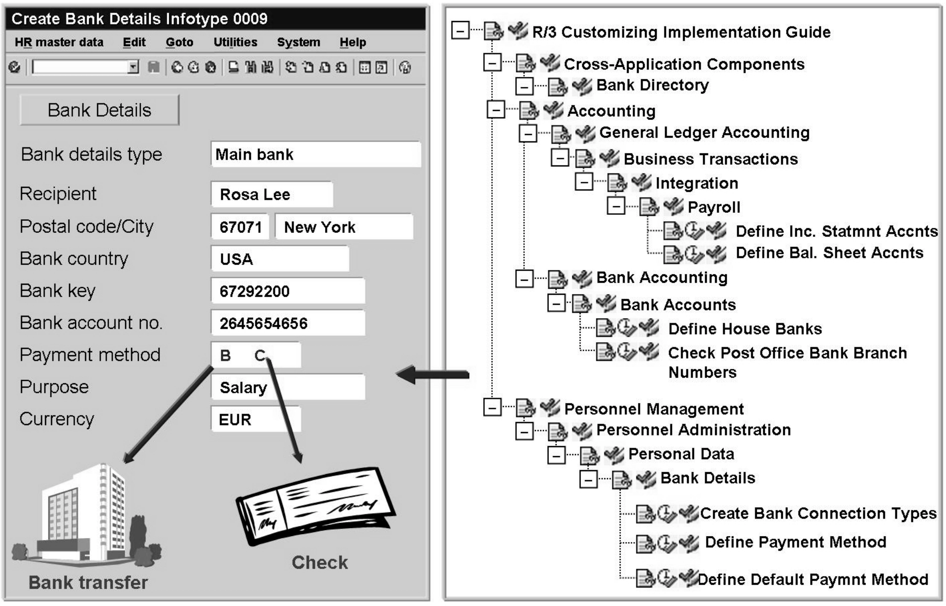


Figure 227: 3) Bank Details

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Exercise 20: Personal Data

Exercise Duration: 10 Minutes

Exercise Objectives

After completing this exercise, you will be able to:

- Maintain personal data of your employee

Business Example

Efficient personnel administration requires a range of maintainable employee personal data. You have already checked your Customizing settings and now want to update the data for your new employee accordingly.

Task 1:

1. Return to the *Hiring HR305* action and fill the *Personal Data* (0002), *Addresses* (0006) and *Bank Details* (0009) infotypes for employee 305992## (## = group number) with entries of your choice.

   Hint: *If you enter details on a spouse, or children, a dynamic action in the system may require additional data. In this case, make the relevant entries, save the data in the infotypes, and continue with the hiring action.*

   After you have maintained and saved the entries in these infotypes, stop the hiring personnel action by selecting "Exit".

Task 2:

1. Use your project IMG to answer the following question:

   What is the IMG path for modifying the marital status?

   ____

   ____

Continued on next page

Task 3:

The following exercise is optional:

1. Your employee with personnel number 305992## will change his or her permanent residence as of the first day of next month.

Task 4:

The following exercise is optional:

1. You have made a typing error in the Street field for your employee with personnel number 305991##, and want to correct it.

Solution 20: Personal Data

Task 1:

1. Return to the *Hiring HR305* action and fill the *Personal Data* (0002), *Addresses* (0006) and *Bank Details* (0009) infotypes for employee 305992## (## = group number) with entries of your choice.

   Hint: *If you enter details on a spouse, or children, a dynamic action in the system may require additional data. In this case, make the relevant entries, save the data in the infotypes, and continue with the hiring action.*

   After you have maintained and saved the entries in these infotypes, stop the hiring personnel action by selecting “Exit”.

   a) *Human Resources → Personnel Management → Administration → HR Master Data*

   b) Choose *Personnel Actions*.

   c) Enter the personnel number *305992##*.

   d) Select the *Hiring HR305* personnel action. Choose *Execute*.

   e) Choose *Execute infogroup* to restart the hiring action.

   f) Choose *Next record* until you reach the *Create Personal Data (Infotype 0002)* screen.

   g) Make entries of your choice in the required fields and save your data.

   h) Choose *Next record* until you reach the *Create Addresses (infotype 0006)* screen.

   i) Make entries of your choice in the required fields and save your data.

   j) Choose *Next record* until you reach the *Create Bank Details (infotype 0006)* screen.

   k) Make entries of your choice in the required fields and save your data.

   l) Choose *Exit* and return to the SAP Easy Access menu.

Task 2:

1. Use your project IMG to answer the following question:

Continued on next page

What is the IMG path for modifying the marital status?

____

____

a) *IMG: Personnel Management → Personnel Administration → Personal Data → Personal Data → Create Marital Status*

Task 3:

The following exercise is optional:

1. Your employee with personnel number 305992## will change his or her permanent residence as of the first day of next month.
   a) Call personnel master data maintenance using the SAP Easy Access menu:
   b) *Human Resources → Personnel Management → Administration → Maintain HR Master Data*
   c) Select the Addresses infotype and then choose *New* or *Copy*
   d) *→ A history is created*

Task 4:

The following exercise is optional:

1. You have made a typing error in the Street field for your employee with personnel number 305991##, and want to correct it.
   a) Call personnel master data maintenance using the SAP Easy Access menu:
   b) *Human Resources → Personnel Management → Administration → Maintain HR Master Data*
   c) Select the Addresses infotype and choose *Change*
   d) *→ No history is created*

Lesson Summary

You should now be able to:

- Review personal data of an employee.

Unit Summary

You should now be able to:

- Review personal data of an employee.

Unit 14

375 Links Between Planned Working Time and Basic Pay

Further information can be found in the Instructor Guide in SAPNet.

Unit Overview

This unit deals with the Planned Working Time and Basic Pay infotypes, and how they are related. In this context, we discuss how data is passed on.

Unit Objectives

After completing this unit, you will be able to:

- Describe how the working time stored in the Planned Working Time infotype (0007) is related to the payroll-relevant data stored in the Basic Pay infotype (0008).
- Explain the relevance of this information for payroll

Unit Contents

Lesson: Links Between Planned Working Time and Basic Pay

376

Lesson Duration: 35 Minutes

Lesson Overview

Contents:

- Infotype 0007: Planned Working Time
- Relationship between the Planned Working Time and Basic Pay infotypes
- Consequences for Payroll

Lesson Objectives

After completing this lesson, you will be able to:

- Describe how the working time stored in the Planned Working Time infotype (0007) is related to the payroll-relevant data stored in the Basic Pay infotype (0008).
- Explain the relevance of this information for payroll

Further information can be found in the Instructor Guide in SAPNet.

Business Example

The employees in your company have specific working times. Attendances and absences can be calculated using these as a basis.

Working times also play an important role in an employee's pay. Here we make the distinction between payment on an hourly basis, and payment for a specified period (for example, a month).

Employee Working Time

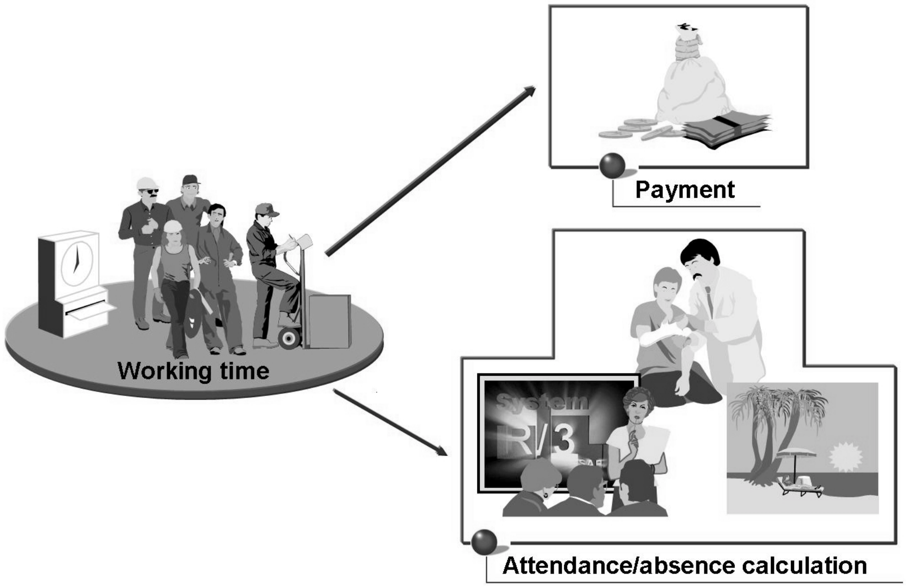

Figure 228: Employee Working Time

You assign each employee to a work schedule. The working time stored for this work schedule is important for the employee's pay, as well as for counting attendances and absences.

In the first step, record the working time information in the Planned Working Time and Basic Pay infotypes.

In the second step, attendance/absence calculation and payroll accesses this information.

Planned Working Time

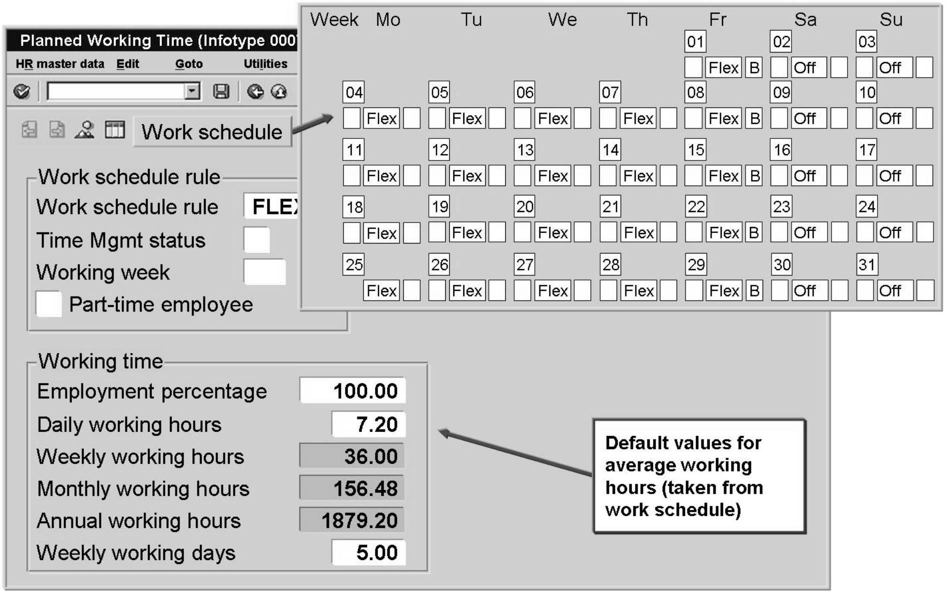

Figure 229: Planned Working Time

The system stores an employee's working time as a work schedule rule in the Planned Working Time infotype (0007). The system also stores the average working hours here. The Monthly working hours field contains the total planned working time for the current month.

Links Between Planned Working Time and Basic Pay

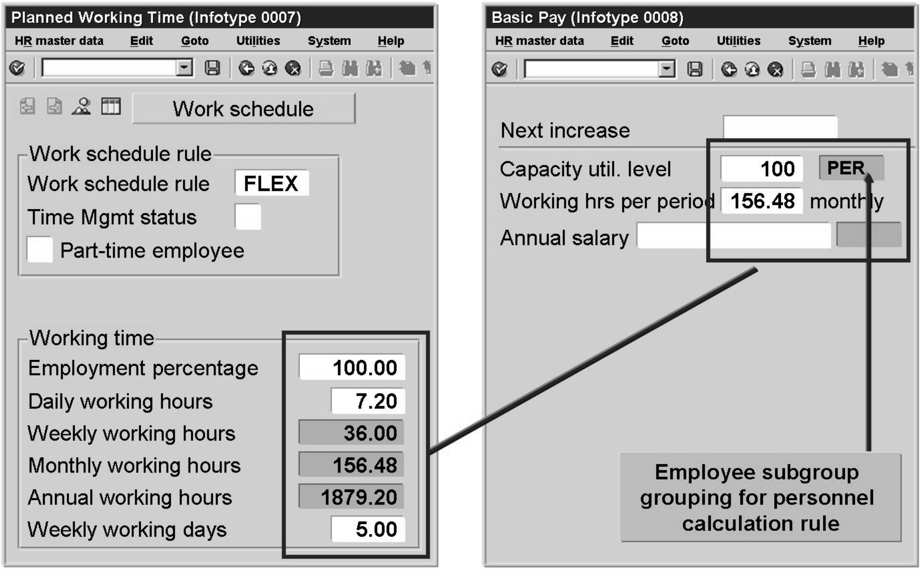

Figure 230: Links Between Planned Working Time and Basic Pay

The system takes the employment percentage and the average number of working hours from infotype 0007 and suggests them as default values for the capacity utilization level and the working hours per period in infotype 0008.

Employee Subgroup Grouping for Personnel Calculation Rule

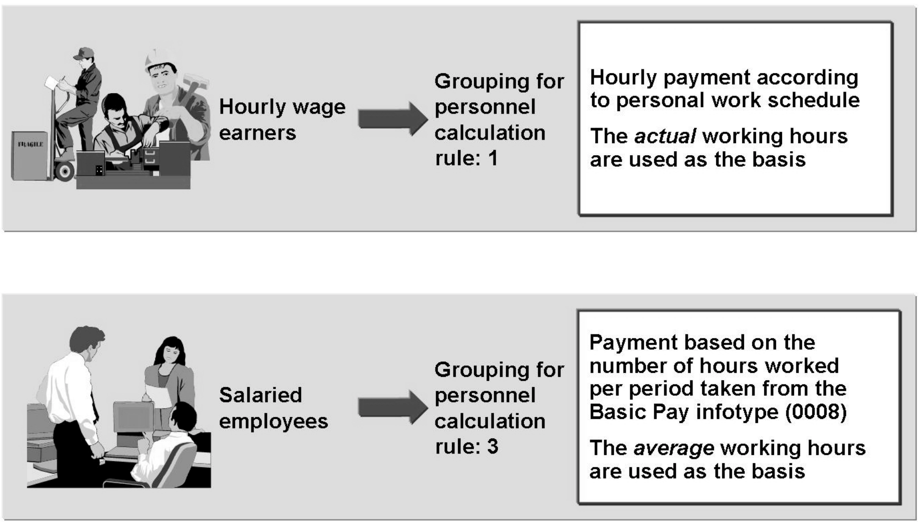

Figure 231: Employee Subgroup Grouping for Personnel Calculation Rule

The distinction is made between employees that are paid on an hourly basis and employees whose pay is based on the number of hours they work per period (for example, salaried).

To realize this difference in the system, you can set up employee subgroup groupings for personnel calculation rules and as a result, the system treats employees differently in payroll. The meaning of the groupings is fixed and cannot be deleted (for example, hourly wage earners: 1, salaried employees: 3).

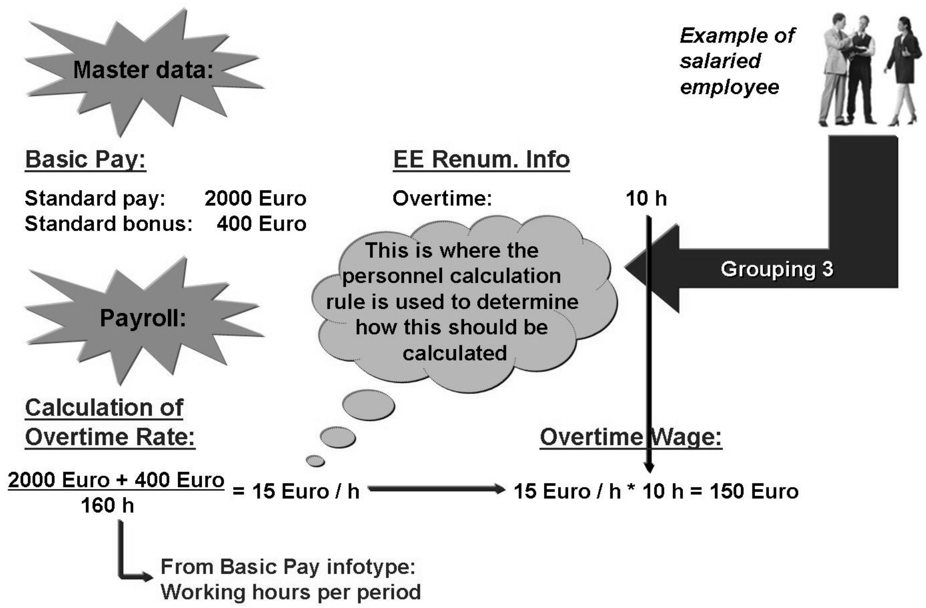

Figure 232: Calculation Example 1: Calculating Overtime Rate for a Salaried Employee

This is an example of how a personnel calculation rule works for a salaried employee.

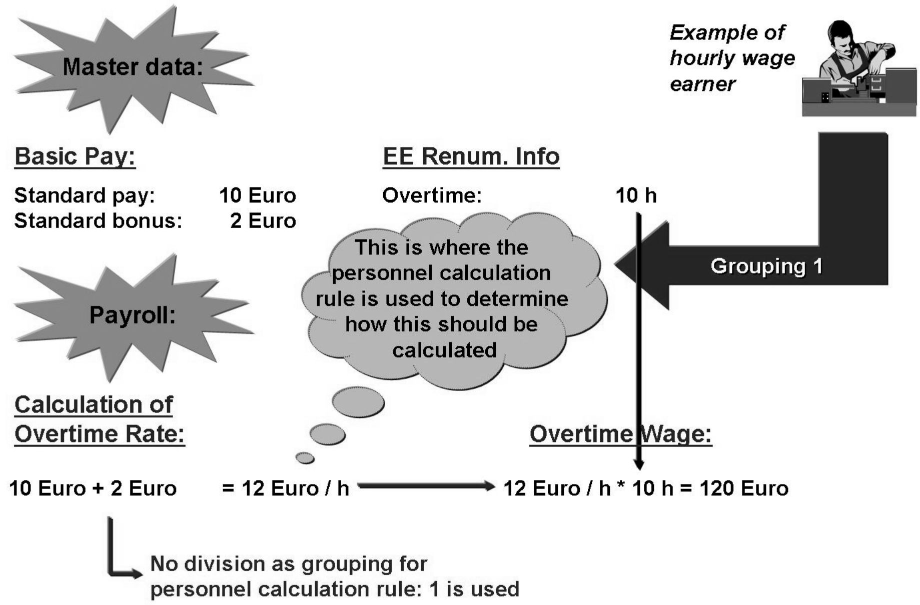

Figure 233: Calculation Example 2: Calculating Overtime Rate for an Hourly Wage Earner

The system uses the same personnel calculation rule to determine an overtime rate for an hourly wage earner. However, as a result of the employee subgroup grouping for the personnel calculation rule (for an hourly wage earner, 1), the personnel calculation rule "knows" that the working hours may not be divided per period.

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Exercise 21: Links Between Planned Working Time and Basic Pay

Exercise Duration: 10 Minutes

Exercise Objectives

After completing this exercise, you will be able to:

- Explain the meaning of the grouping of employee subgroups and the relationship between planned working time and basic pay

Business Example

Our enterprise now has several different employee subgroups, which should be treated similarly for payroll purposes. This means that you have to group together your employee subgroups for personnel calculation rules. You will also have an overview of the links between planned working time and basic pay.

Task:

Do the following exercises:

1. In the IMG under Basic Pay, check that the correct grouping for personnel calculation rules has been assigned to your employee subgroup.
2. What are the possible entries for the grouping for personnel calculation rules? Has the correct grouping been assigned to your employee subgroup?

   ____

   ____

3. Should you change the meaning of the groupings, so that 1 is used for salaried employees, and 3 for industrial employees, for example?

   ____

   ____

4. Return to the *Hiring HR305* personnel action and create the *Planned Working Time* infotype (0007). Select the *NORM* work schedule rule. Before you save your entries, choose *Enter*. Note what happens after you choose Enter:

   ____

   ____

5. After you save your entries, the system displays the *Create Basic Pay screen (infotype 0008)*. This is part of the hiring action. Note the following default values:

Continued on next page

PS type:	________________
Pay scale area:	________________
Capacity util. level:	________________
Working hrs/period:	________________

Where do the values for *Capacity utilization level* and *Working hrs/period* come from?

____

____

Leave the infotype **without saving** your entries (choose *Exit*).

Solution 21: Links Between Planned Working Time and Basic Pay

Task:

Do the following exercises:

1. In the IMG under Basic Pay, check that the correct grouping for personnel calculation rules has been assigned to your employee subgroup.

   a) *Personnel Management → Personnel Administration → Payroll data → Basic Pay → Define EE Subgroup Grouping for PCR and Coll.Agrmt.Prov.*

   b) In the *Determine Work Area: Entry* dialog box, enter country grouping 99.

2. What are the possible entries for the grouping for personnel calculation rules? Has the correct grouping been assigned to your employee subgroup?

   ____

   ____

   a) A distinction is made between employees who are paid on an hourly basis, and those paid on the basis of their average working time per period. The possible entries for the personnel calculation rule are as follows:

      1 = Hourly wage earners

      2 = Employees with periodic payment (such as monthly wage earners)

      3 = Salaried employees

      4 = Special payment group - for German public sector only

   b) Check to see whether the following entry exists: Employee group *1*, Employee subgroup *##*, and PCR grouping *1*.

   c) **Note**: This entry was created when you copied your employee subgroup.

3. Should you change the meaning of the groupings, so that 1 is used for salaried employees, and 3 for industrial employees, for example?

   ____

Continued on next page

---

a) No. The meaning of the above personnel calculation rules is fixed in the system, and should NOT be changed. The only change you can make is to the assignment of *groupings for personnel calculation rules* to each employee subgroup.

4. Return to the *Hiring HR305* personnel action and create the *Planned Working Time* infotype (0007). Select the *NORM* work schedule rule. Before you save your entries, choose *Enter*. Note what happens after you choose Enter:

   ____

   ____

   a) *Human Resources→ Personnel Management → Administration → HR Master Data*

   b) Select *Personnel Actions*.

   c) Enter the personnel number *305992##*.

   d) Select *Hiring HR305*.

   e) Choose *Execute*.

   f) Choose *Execute infogroup* to restart the hiring personnel action.

   g) Choose *Next Record* until you reach *Create Planned Working Time (infotype 0007)*.

   h) Enter the *NORM* work schedule rule and choose *Enter*.

   i) **The system automatically reads the working times from the work schedule**.

   j) Save the data.

5. After you save your entries, the system displays the *Create Basic Pay screen (infotype 0008)*. This is part of the hiring action. Note the following default values:

PS type:	________________
Pay scale area:	________________
Capacity util. level:	________________
Working hrs/period:	________________

Where do the values for *Capacity utilization level* and *Working hrs/period* come from?

____

Continued on next page

Leave the infotype **without saving** your entries (choose *Exit*).

a)

PS type:	**90**
Pay scale area:	**50**
Capacity util. level:	**100.00**
Working hrs/period:	**163**

The values for *the capacity utilization level* and *the working time per period* originate from the values for *employment percentage* and *monthly working hours* from the Planned Working Time infotype.

Choose *Exit*.

Lesson Summary

You should now be able to:

- Describe how the working time stored in the Planned Working Time infotype (0007) is related to the payroll-relevant data stored in the Basic Pay infotype (0008).
- Explain the relevance of this information for payroll

Unit Summary

You should now be able to:

- Describe how the working time stored in the Planned Working Time infotype (0007) is related to the payroll-relevant data stored in the Basic Pay infotype (0008).
- Explain the relevance of this information for payroll

Unit 15

391

Remuneration Structure

Further information can be found in the Instructor Guide in SAPNet.

Unit Overview

To begin with, parts of the pay structure are examined. The options for automatically defining default pay scale type and area are discussed in this unit.

Unit Objectives

After completing this unit, you will be able to:

- Create the regional, industry-specific, financial, and time-related aspects of the remuneration structure.
- Define the control parameters depending on the employee subgroup and personnel subarea.
- Determine default values for pay scale data

Unit Contents

Lesson: Remuneration Structure

392

Lesson Duration: 65 Minutes

Lesson Overview

- Parts of the remuneration structure
- Options for defining default values

Lesson Objectives

After completing this lesson, you will be able to:

- Create the regional, industry-specific, financial, and time-related aspects of the remuneration structure.
- Define the control parameters depending on the employee subgroup and personnel subarea.
- Determine default values for pay scale data

Further information can be found in the Instructor Guide in SAPNet.

Business Example

SAP makes a distinction between two remuneration types: salary and pay scale.

At your company, employees' pay is regulated by collective agreement provisions.

These collective agreement provisions are based on location (pay scale areas).

Remuneration Types

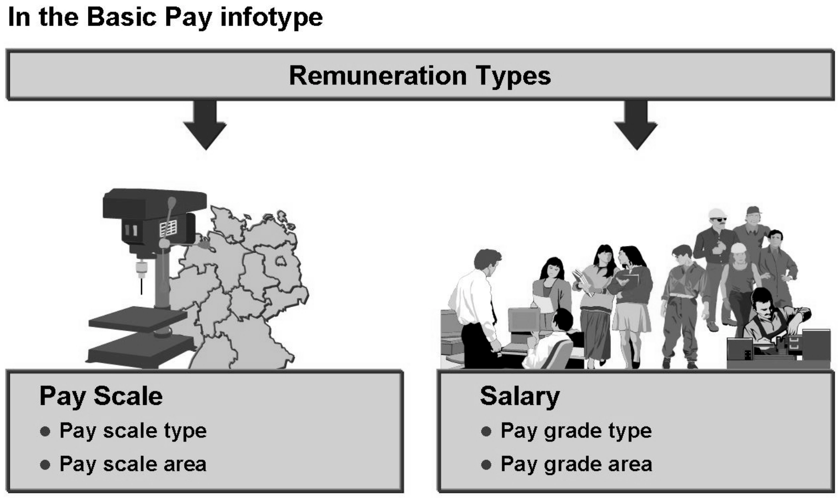

Figure 234: Remuneration Types

In the Basic Pay infotype, you can set the remuneration type to pay scale or salary using the *Change Remuneration Type* option in the Edit menu. The remuneration type can also be defaulted using the TARIF feature.

If you want to use a salary structure, refer to the courses on Compensation Management.

If you want to evaluate wage types indirectly (see next unit), you must build a pay scale structure (Table T510) because the system also uses this pay scale structure to evaluate wage types indirectly if you use salary structures. The following graphics and notes clarify how to create this pay scale structure.

Pay Scale Structure

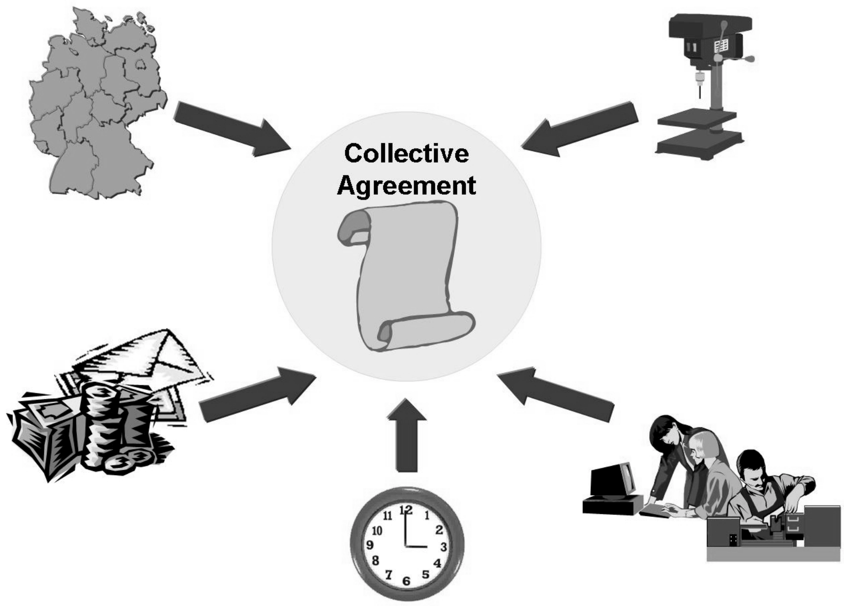

Figure 235: Overview: Pay Scale Structure

The remuneration structure includes information on regional (geographic) aspects, as well as data on specific industries, times, and finances. However, you must make a differentiation between pay scale employees and salaried employees.

You assign an employee to a remuneration structure when you create the Basic Pay infotype (0008) for the employee.

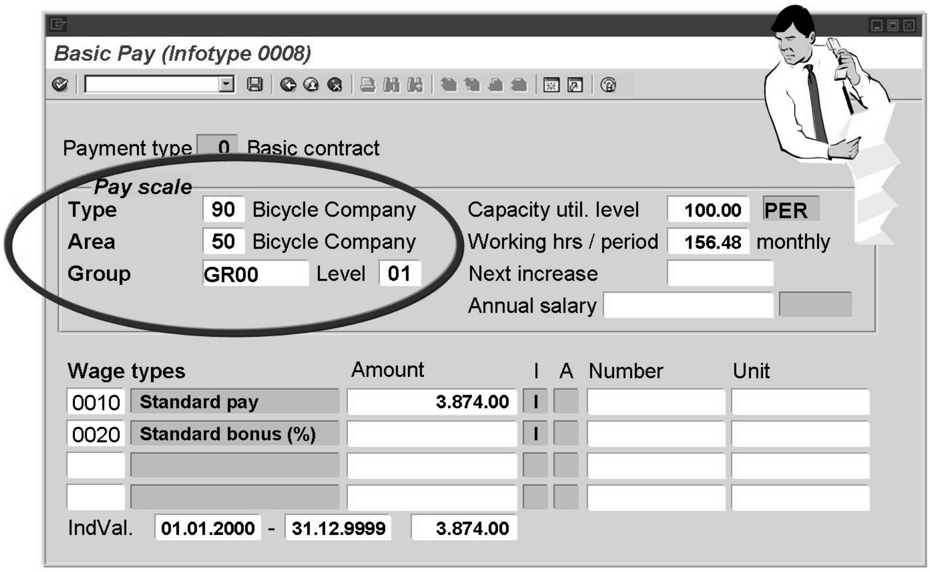

Figure 236: Pay Scale Data Stored in Basic Pay

You store an employee's pay scale data in the Basic Pay infotype (0008).

Even if you do not have collective agreement provisions at your company and employees negotiate their pay when you hire them, you must still define a pay scale type and pay scale area, an employee grouping for collective agreement provision, and a pay scale group. You must make an entry in these fields in infotype 0008 and there must be at least one entry in the relevant tables.

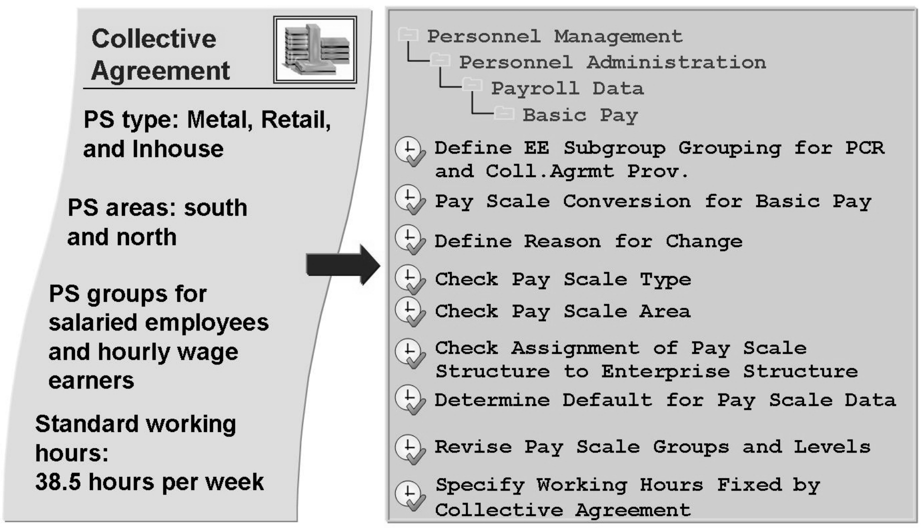

Figure 237: Depicting Pay Scale Data in the SAP System

At your company, employees' pay is regulated by a number of collective agreement provisions. The differences are based on location (pay scale areas).

The collective agreement provisions determine how much you pay the employees.

You use the pay scale groups and pay scale levels to depict the different payments in the system.

The individual IMG steps for setting up the remuneration structure in the SAP system appear on the right of the graphic.

Employee Subgroup Groupings for Collective Agreement

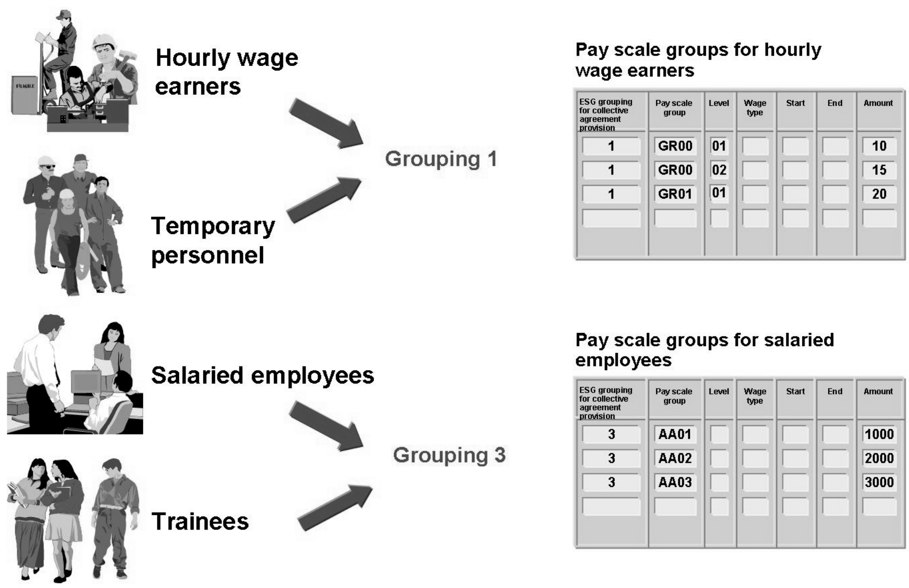

Figure 238: Employee Subgroup Groupings for Collective Agreement

The employee subgroup grouping for the collective agreement provision allows you to assign different employees to different pay scale groups. You can use the Customizing functions to group employee subgroups.

The SAP system contains the following groupings as standard:

1. Pay scale employee/hourly wage → Indicator 1
2. Pay scale employee/monthly wage → Indicator 2
3. Salaried employee → Indicator 3
4. Non-pay scale employee → Indicator 4
5. Executive → Indicator 5

The most important function of the employee subgroup grouping for the collective agreement provision is:

- To define pay scale groups and pay scale levels within the grouping for each pay scale type and pay scale area.

Pay Scale Type and Pay Scale Area

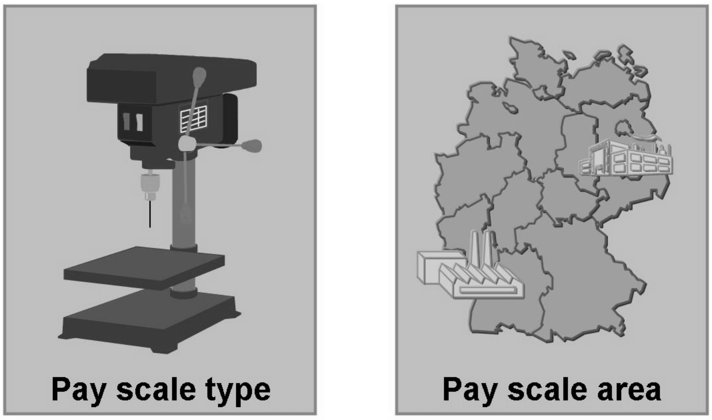

Figure 239: Defining Pay Scale Type and Pay Scale Area

Pay Scale Type

In the SAP system, pay scale types are two-character keys defined for each region. You must maintain the pay scale types when you set up your system.

Pay Scale Area

The pay scale area represents the geographical region to which a pay scale or collective agreement applies. In the SAP system, pay scale areas are two-character keys that are defined for each region. You maintain pay scale areas when you set up your system.

Default Values for Pay Scale Type and Pay Scale Area

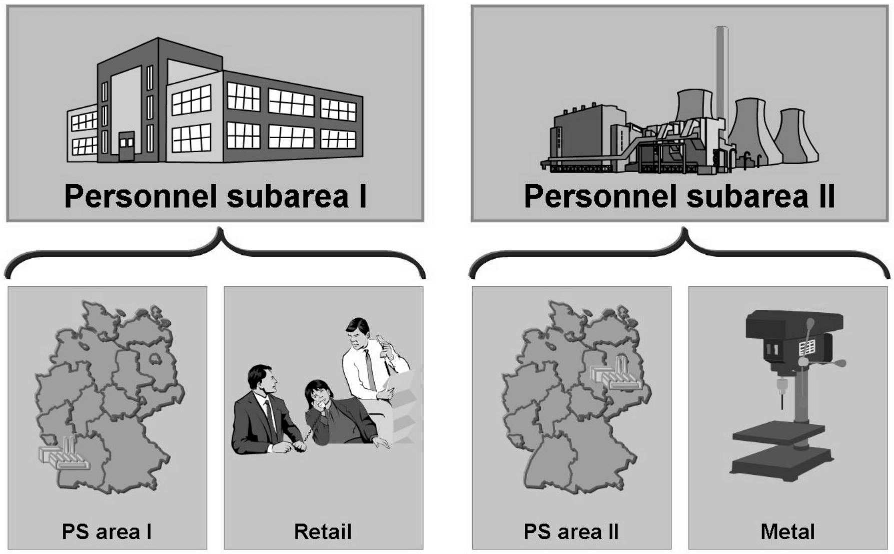

Figure 240: Assigning Pay Scale Type/Pay Scale Area to Personnel Subarea

You can assign the pay scale type and the pay scale area to the various personnel subareas using the IMG table "Check Assignment of Pay Scale Structure to Enterprise Structure".

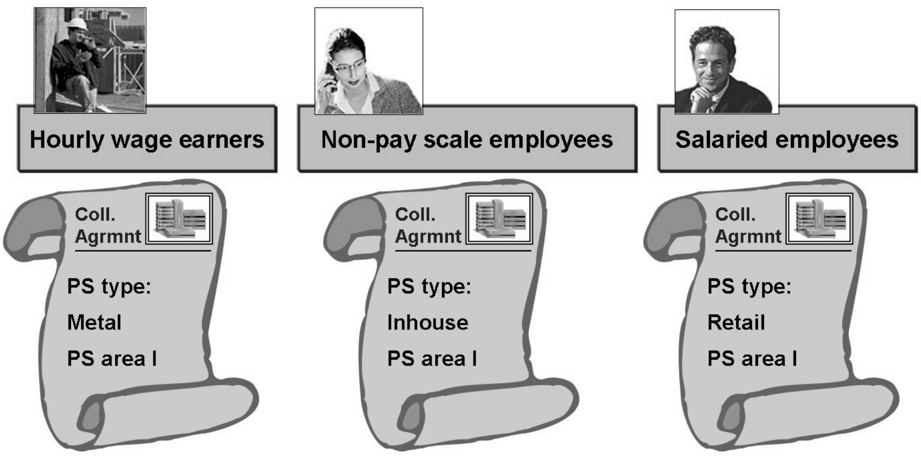

Figure 241: Default Pay Scale Data Using Feature TARIF

You can define default values using the pay scale type and pay scale area assigned to the personnel subarea, or with a decision rule.

You can define default values for different pay scale types and pay scale areas in the Basic Pay infotype (0008) for employees with different organizational assignment data.

You must enter the return value in the following format: xx/yy/z, where xx is the pay scale type, yy is the pay scale area, and z describes the type of planned remuneration (Organizational Management infotype (1005)). By specifying the type of planned remuneration, you can record information on salary and remuneration structures. In this way, the system can propose data for the pay scale type and pay scale area depending on the position currently occupied by the employee.

Pay Scale Table

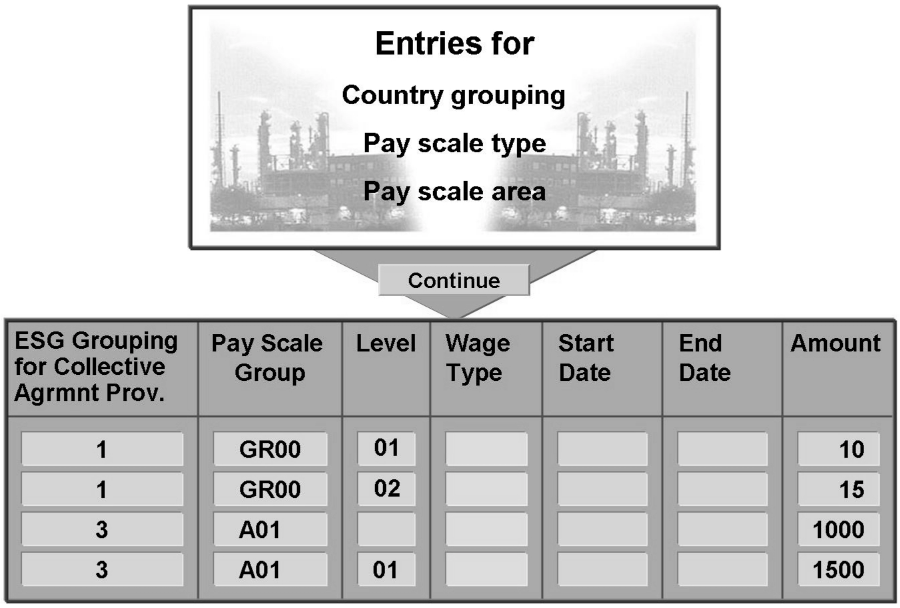

Figure 242: Pay Scale Groups and Pay Scale Levels

The enterprise and personnel structure determine which pay scale group and pay scale level view appears in infotype 0008.

You define pay scale groups and pay scale levels for each country grouping, pay scale type, pay scale area, and employee subgroup grouping for collective agreement provision.

Pay scale groups are used for scheduling job evaluations and indirect valuations.

Pay scale groups are divided into pay scale levels.

399 Exercise 22: Remuneration Structure

Exercise Duration: 15 Minutes

Exercise Objectives

After completing this exercise, you will be able to:

- Depict the pay scale structures to be used for production employees.

Business Example

Production employees in pay scale level 01 receive an hourly wage of EUR 15, as well as bonuses of EUR 2, EUR 3, and EUR 4 in each subsequent level.

Task 1:

Do the following exercises:

1. In the IMG (under Basic Pay), check the grouping for collective agreement provision for your employee subgroup ##. Your grouping is:

Task 2:

You want to assign a pay scale type and pay scale area to your production employee in personnel area PA## and personnel subarea Production 0004.

1. Check the list of pay scale types. You want to use pay scale type **90 CAB Company** for your employee. You do not need to create a new pay scale type.
2. Create a pay scale area to be used exclusively for your own personnel subarea. Create pay scale area ***70+##*** (for example, 71 for group 01), and name it ***Production area ##***. Your pay scale area is called:
3. In the appropriate Customizing table, assign the pay scale type and pay scale area to your personnel subarea in personnel area PA##.
4. Create a pay scale table. Use the data from the business scenario (see above) and the grouping for collective agreement provision to which your employee subgroup ## is assigned (refer to exercise 1):

Grpg	PS group	Lv.	Start date	End date	Amount
	GR##	01	01.01.2005	31.12.9999	**15,00**
	GR##	02	01.01.2005	31.12.9999	**17,00**
	GR##	03	01.01.2005	31.12.9999	**18,00**
	GR##	04	01.01.2005	31.12.9999	**19,00**

Continued on next page

Task 3:

Do the following exercises:

1. If you now create the *Basic Pay* infotype for your employee 305992##, you will see that the values for pay scale type and pay scale area are defaulted from the table *Check Assignment of Pay Scale Structure to Enterprise Structure*.

   This is because the TARIF feature is deactivated. Call the TARIF feature. How can you recognize that the feature is deactivated?

   What entries would you have to make to have the system propose pay scale type 90 and your pay scale area 70+## as default values for your employee according to employee subgroup?

   Do not activate or save the feature.

Task 4:

Do the following exercises:

1. Go to master data maintenance to create a new record for the *Basic Pay* infotype. Check the default values for the pay scale type and pay scale area. Select *GR##, Level 01* as the pay scale group and pay scale level. Finally, choose *Exit* to leave the *Basic Pay* infotype (0008) *WITHOUT* saving your entries.

Solution 22: Remuneration Structure

Task 1:

Do the following exercises:

1. In the IMG (under Basic Pay), check the grouping for collective agreement provision for your employee subgroup ##. Your grouping is:
   a) IMG: *Personnel Management → Personnel Administration → Payroll Data → Basic Pay → Define EE Subgroup Grouping for PCR and Coll.Agmt.Prov.*
   b) In the *Determine Work Area: Entry* dialog box, make sure that country grouping 99 is displayed.
   c) Check to see whether the following entry exists: Employee group *1*, employee subgroup ##, and ESG for PCR **1**.

Task 2:

You want to assign a pay scale type and pay scale area to your production employee in personnel area PA## and personnel subarea Production 0004.

1. Check the list of pay scale types. You want to use pay scale type **90 CAB Company** for your employee. You do not need to create a new pay scale type.
   a) IMG: *Personnel Management → Personnel Administration → Payroll Data → Basic Pay → Check Pay Scale Type*
   b) Pay scale type: 90, Pay scale type text: *CAB Company*
2. Create a pay scale area to be used exclusively for your own personnel subarea. Create pay scale area ***70+##*** (for example, 71 for group 01), and name it ***Production area ##***. Your pay scale area is called:
   a) IMG: *Personnel Management → Personnel Administration → Payroll Data → Basic Pay → Check Pay Scale Type*
   b) Select *New entries*.
   c) Enter ***70+##*** for the pay scale area, and ***Production area ##*** for the pay scale area text.

Continued on next page

3. In the appropriate Customizing table, assign the pay scale type and pay scale area to your personnel subarea in personnel area PA##.

   a) IMG: *Personnel Management → Personnel Administration → Payroll Data → Basic Pay → Check Assignment of Pay Scale Structure to Enterprise Structure*

   b) Change your entry as follows:

   c) Pers.area: *PA##,* Personnel subarea: *0004*, P.Scale Area *70+##*, P.scale type *90*

   d) Save your data and return to the IMG.

4. Create a pay scale table. Use the data from the business scenario (see above) and the grouping for collective agreement provision to which your employee subgroup ## is assigned (refer to exercise 1):

Grpg	PS group	Lv.	Start date	End date	Amount
	GR##	01	01.01.2005	31.12.9999	**15,00**
	GR##	02	01.01.2005	31.12.9999	**17,00**
	GR##	03	01.01.2005	31.12.9999	**18,00**
	GR##	04	01.01.2005	31.12.9999	**19,00**

   a) IMG: *Personnel Management → Personnel Administration → Payroll Data → Basic Pay → Revise Pay Scale Groups and Levels*

   b) In the Determine Work Area: Entry dialog box, enter *99* for the Country grouping, *90* for the Pay scale type, and *70+##* for the pay scale area.

   c) Select *New entries*.

   d) Create the following entries:

Grpg	PS group	Lv.	Start date	End date	Amount
1	GR##	01	01.01.2005	31.12.9999	**15,00**
1	GR##	02	01.01.2005	31.12.9999	**17,00**
1	GR##	03	01.01.2005	31.12.9999	**18,00**
1	GR##	04	01.01.2005	31.12.9999	**19,00**

   e) Save your data and return to the IMG.

Continued on next page

Task 3:

Do the following exercises:

1. If you now create the *Basic Pay* infotype for your employee 305992##, you will see that the values for pay scale type and pay scale area are defaulted from the table *Check Assignment of Pay Scale Structure to Enterprise Structure*.

   This is because the TARIF feature is deactivated. Call the TARIF feature. How can you recognize that the feature is deactivated?

   What entries would you have to make to have the system propose pay scale type 90 and your pay scale area 70+## as default values for your employee according to employee subgroup?

Continued on next page

Do not activate or save the feature.

a) IMG: *Personnel Management → Personnel Administration → Payroll Data → Basic Pay → Determine Default for Pay Scale Data*

b) The *Process feature TARIF: Decision tree* screen appears

c) To change the TARIF feature in tree maintenance, you would have to complete the following processing steps:

d) Position the cursor on the *PERSK* node in employee group *Active*, and select the *Create nodes* function. In the *Values for PERSK* screen, enter ## (## is your new employee subgroup). Then select *Transfer*.

e) Position the cursor on the new node and select *Create nodes*.

f) Accept the *Return value* default setting in the following screen and confirm by choosing *Enter*. In the *Return value for field value ##* screen that appears, enter 90/70+## (for example, 90/71 for group 01) and select *Transfer*.

Do not activate or save the feature.

Hint: (USA and Canada) If your payroll period is not monthly, you will need to set up the pay scale rule *Pay Scale Assignment → Periods for the Payroll Period*.

IMG: *Personnel Management → Personnel Administration → Payroll Data → Basic Pay → Set up payroll period for collective agreement provision*

Hint: (USA and Canada) If you do not use an annual salary calculation, you must define a *salary area* for each pay scale group and pay scale level.

IMG: *Personnel Management → Personnel Administration → Payroll Data → Basic Pay → Define pay scale salary ranges*

Continued on next page

Task 4:

Do the following exercises:

1. Go to master data maintenance to create a new record for the *Basic Pay* infotype. Check the default values for the pay scale type and pay scale area. Select *GR##, Level 01* as the pay scale group and pay scale level. Finally, choose *Exit* to leave the *Basic Pay* infotype (0008) *WITHOUT* saving your entries.

   a) *Human Resources → Personnel Management → Administration → HR Master Data*

   b) Choose *Maintain*.

   c) Enter the personnel number *305992##.*

   d) Select the *Basic Pay* infotype, and choose *Create*.

   e) The default for pay scale type/pay scale area should be: *90 / 70+##*

   f) Enter *GR##* for the pay scale group, and *01* for the pay scale level.

   g) Leave the *Basic Pay* (0008) infotype WITHOUT saving your entries (choose *Exit*) and return to the main menu.

Lesson Summary

You should now be able to:

- Create the regional, industry-specific, financial, and time-related aspects of the remuneration structure.
- Define the control parameters depending on the employee subgroup and personnel subarea.
- Determine default values for pay scale data

Unit Summary

You should now be able to:

- Create the regional, industry-specific, financial, and time-related aspects of the remuneration structure.
- Define the control parameters depending on the employee subgroup and personnel subarea.
- Determine default values for pay scale data

Unit 16

409

Wage Type Structure

Further information can be found in the Instructor Guide in SAPNet.

Unit Overview

Selected wage types are copied using the wage type copier. These wage types are made permissable using certain Customizing settings for certain infotypes and employees. The dialog characteristics of wage types and the indirect valuation of wage types is also discussed in this section. Finally, the unit describes the steps that are necessary for the system to automatically propose wage types.

Unit Objectives

After completing this unit, you will be able to:

- Explain the meaning of wage types in SAP
- Copy wage types and know what one must pay attention to when copying wage types
- Identify the control indicators that are used to determine to whom the wage type can be assigned, when it can be assigned, and how often.
- Specify the dialog characteristics of the wage types
- Know how wage types can be valuated indirectly by the system
- Set wage types as defaults for an employee with the help of the LGMST feature and a wage type model, depending on the enterprise and personnel structure

Unit Contents

Lesson: Setting Up Wage Types

410

Lesson Duration: 85 Minutes

Lesson Overview

Copy wage types
Permissibility of wage types for:

- Certain infotypes
- Certain employee subgroups and/or personnel subareas

Lesson Objectives

After completing this lesson, you will be able to:

- Explain the meaning of wage types in SAP
- Copy wage types and know what one must pay attention to when copying wage types
- Identify the control indicators that are used to determine to whom the wage type can be assigned, when it can be assigned, and how often.

Further information can be found in the Instructor Guide in SAPNet.

Business Example

New wage types must be created in your company.

You should become familiar with wage types and customize the copied wage types so that they are only allowed in the Basic Pay infotype for certain employee subgroups.

General Information about Wage Types

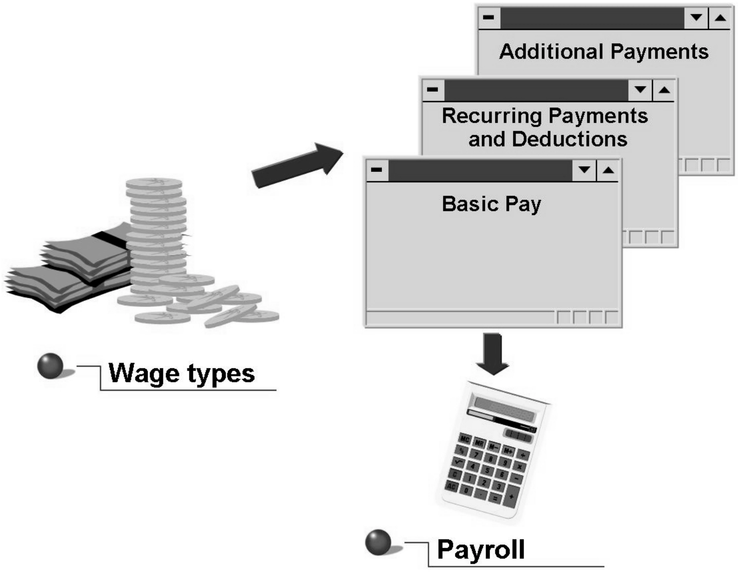

Figure 243: Employees' Payments and Deductions

Wage types are the key element in the wage type structure. Wage type is the most important concept in Human Resources. You use wage types to assign payments and deductions, as well as to control the Payroll program. You use wage characteristics to distinguish the individual wage types.

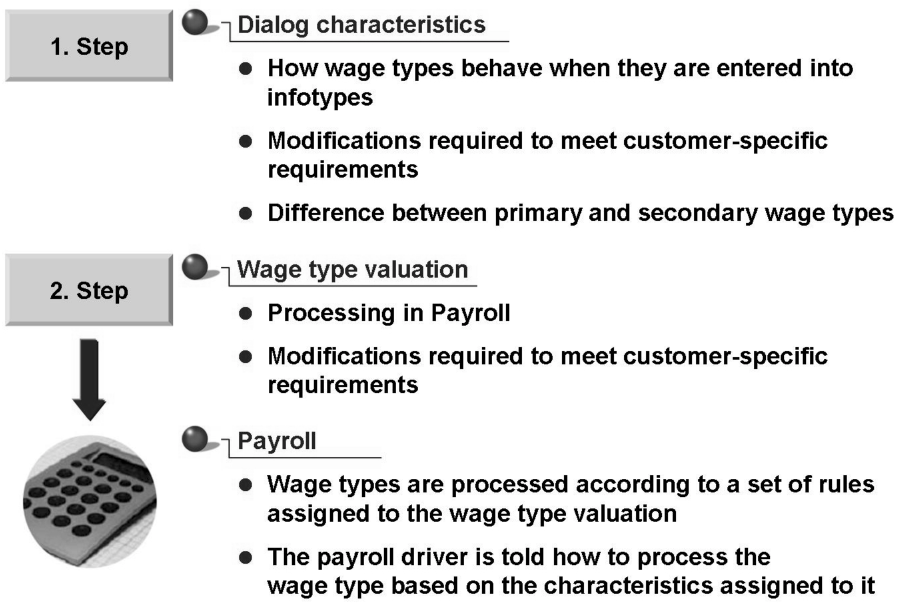

Figure 244: Setting Up Wage Types

In the mySAP ERP 2005 system, you need wage types to pay employees.

In the SAP system there are two main categories:

- Primary or dialog wage types
- Secondary or technical wage types

Each individual company defines the **primary or dialog wage types** so that they can depict the company's specific payroll requirements.

- The SAP system contains examples of primary/dialog wage types in a sample wage type catalog. For example, MA10 - standard pay.
- The characteristics are generally pre-defined for model wage types.

The standard system also contains **secondary or technical wage types**. You can recognize these as they have a slash “/” as the first character.

- Wage type characteristics have not been defined for technical wage types, as the system defines their value during payroll processing.
- Technical wage types are not part of the employee's master data.

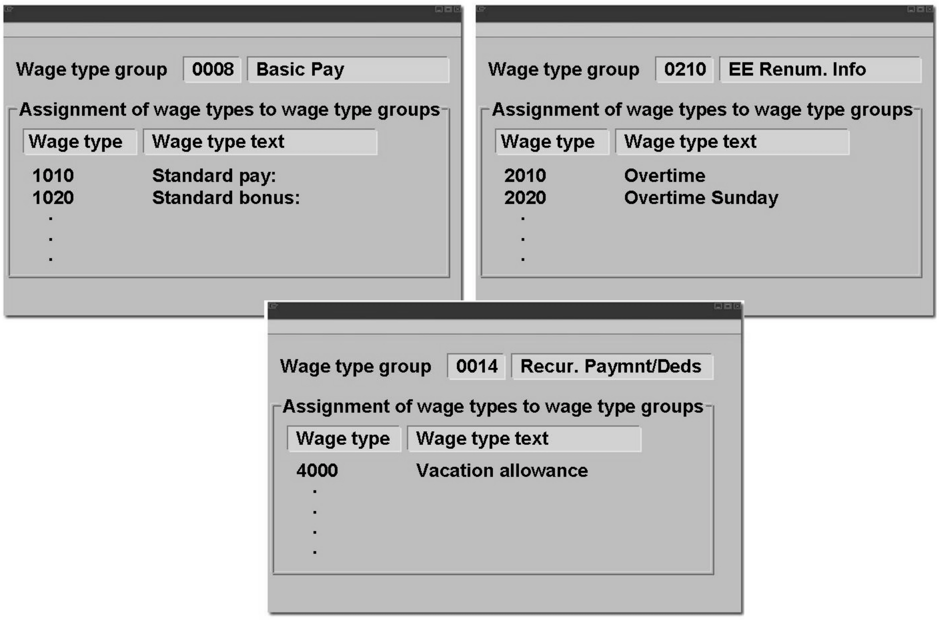

Figure 245: Using Wage Type Groups (Example)

SAP uses the wage type group concept to group wage types that have similar characteristics with regard to payroll.

Examples of wage type groups:

- 0008 - Basic Pay
- 0015 - Additional Payments
- 2010 - Employee Remuneration Information

You must assign all wage types to a wage type group. This is also true for user-defined wage types. You have to assign wage types to wage type groups so that you can work with the Implementation Guide (IMG). In the Implementation Guide, you only perform wage type maintenance for the wage types required in that particular section of the IMG. You select these wage types according to wage type group. This means that you can only use the IMG to maintain wage types that have been assigned to wage type groups.

If the wage types have not been assigned to a wage type group, they do not appear in the wage type maintenance in the IMG.

Dialog Characteristics

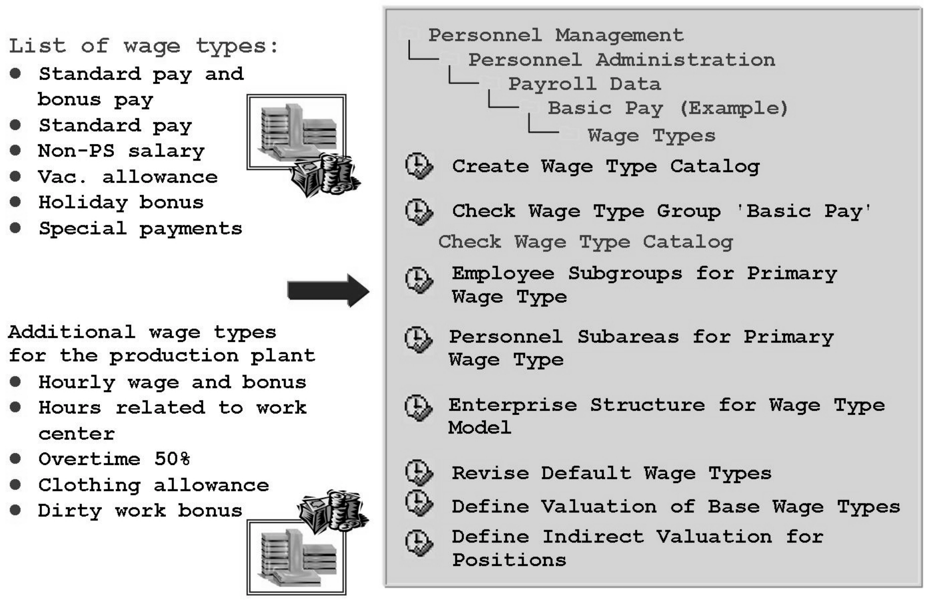

Figure 246: Dialog Characteristics of the Payment Structure in the SAP System

To ensure that the employees in your company receive the correct payment, you need to define different wage types.

The IMG steps that you must perform to define dialog wage types appear on the right, using the steps required for basic pay as an example.

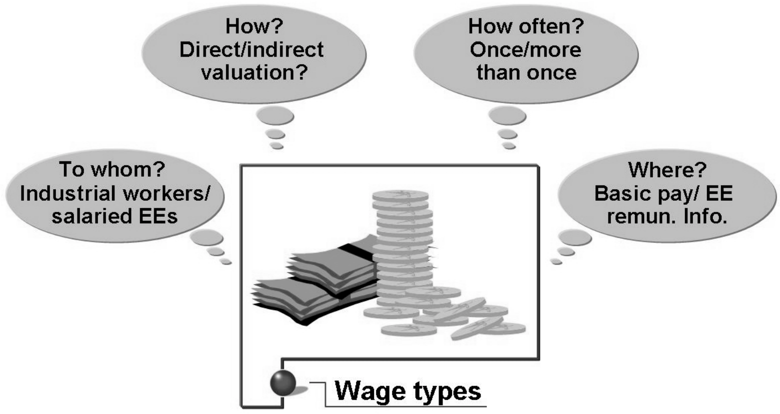

Figure 247: Overview - Dialog Characteristics

You must create wage types before an employee's pay can be calculated.

Wage types have the following functions:

- **Permissibility check** for wage and salary types
  - For each personnel area and personnel subarea
  - For each employee group and employee subgroup
  - For each infotype: if an infotype has a subtype that is a wage type, the time constraint determines how often a wage type can be available at any one time.

The **operation indicator** controls whether a wage type is a payment or a deduction.

The **input combination** controls which of the fields must be filled when you enter a wage type – amount, number, unit of time/measurement.

A wage type can be valuated **indirectly** if you enter a module name, module variant and a rounding indicator. The system then automatically reads the amount from the corresponding tables and you do not need to enter and store it in the Basic Pay infotype (0008).

Copying Wage Types

SAP - Sample Wage Type Catalog

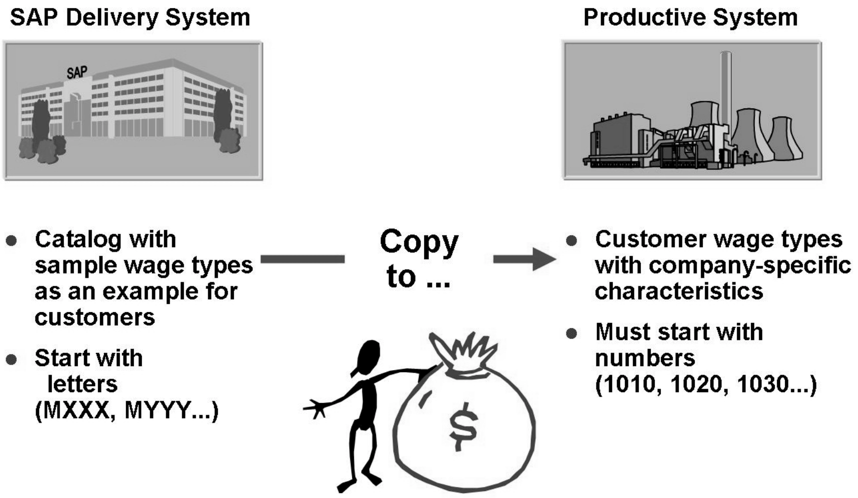

Figure 248: SAP - Sample Wage Type Catalog

The SAP system contains sample wage types. These sample wage types meet some of your company's requirements. You can use the wage type copier to copy the SAP sample wage types. You then use these copies as your wage types and can modify them so that they meet your specific requirements.

Create Wage Type Catalog

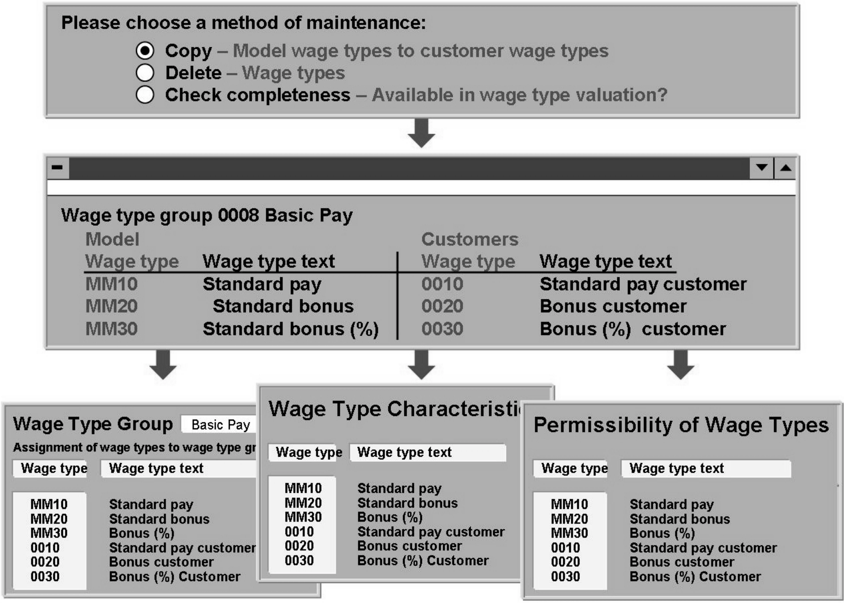

Figure 249: Create Wage Type Catalog

All model wage types start with a letter. Your own wage types, in other words the copies of model wage types, must start with a number.

When you copy the wage types, make sure that you copy the model wage type characteristics that determine how the wage types behave in dialog, as well as the characteristics that determine how the wage types behave in payroll.

You can check and modify the characteristics relevant for payroll when you carry out the payroll Customizing activities.

The wage types that you create via the copy method are included in all of the wage type groups and tables as the original wage type from which you copied. You can use the log to check what was copied.

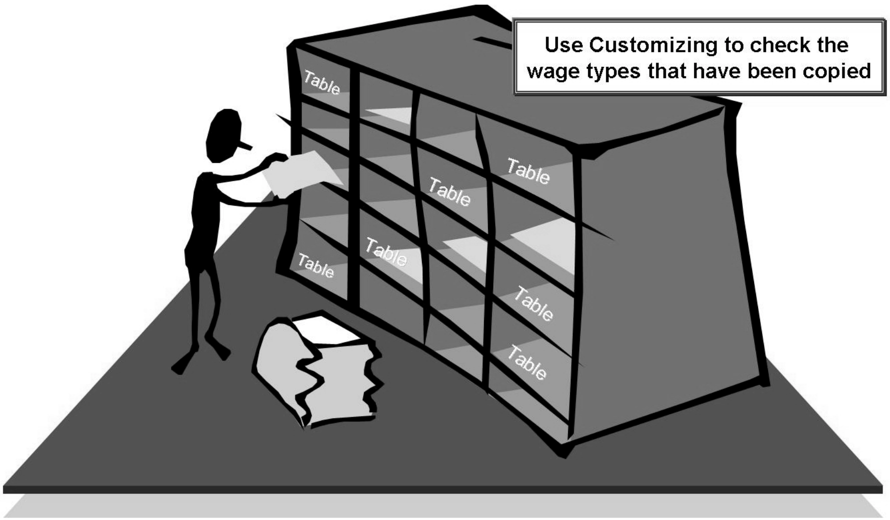

Figure 250: Checking the Individual Steps of the Copy Procedure

You have now copied the wage types. You now need to check the individual tables to which the customer wage types were copied.

You can check and modify the dialog characteristics in the subsequent customizing steps.

Permissibility of Wage Types in Infotypes

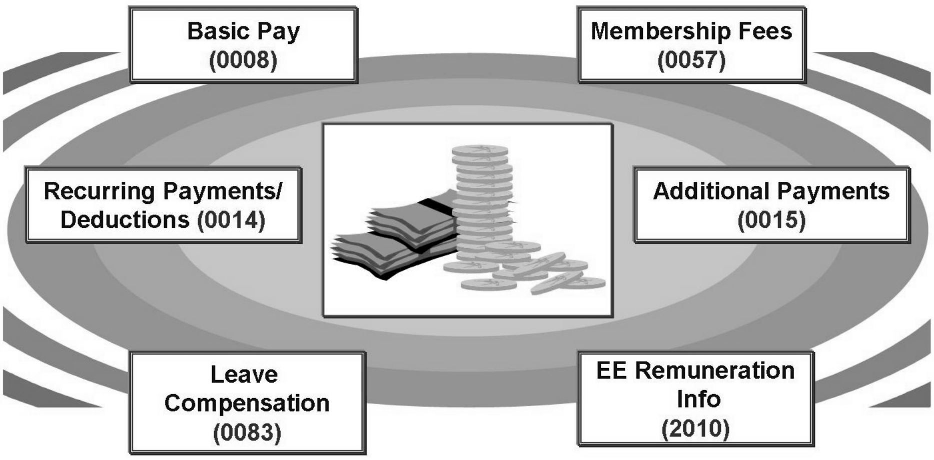

Figure 251: Defining Wage Type Permissibility for Infotypes

In the IMG, you can determine which wage types can be entered in the different infotypes. You can make settings in Customizing so only certain wage types are permissible for infotypes. If you could select all wage types in all infotypes, this would result in incorrect input data and mean that you are constantly searching for the correct wage type.

If you copy a wage type for an infotype using “Create wage type catalog”, the system copies all the characteristics belonging to the wage type you are copying. This also applies to the wage type permissibility for an infotype.

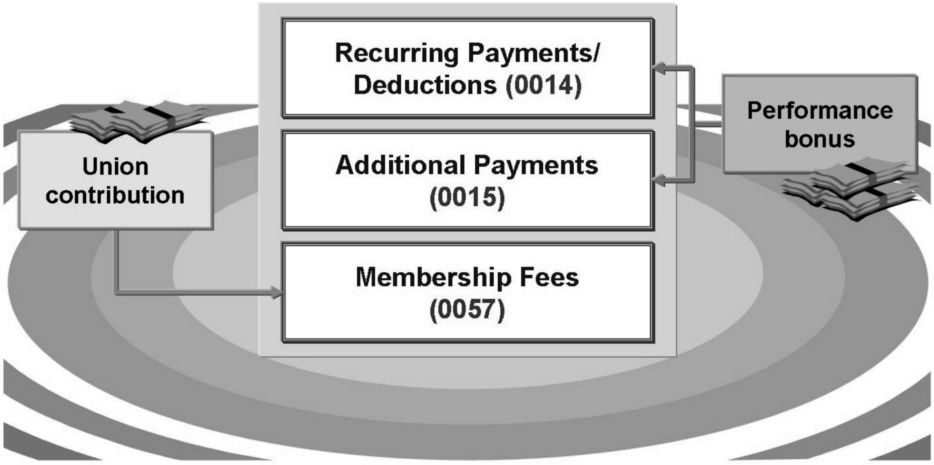

Figure 252: Wage Type Permissibility for Several Infotypes

If you want to use a wage type in several infotypes, then you must enter it in the permissibility tables of the respective infotypes.

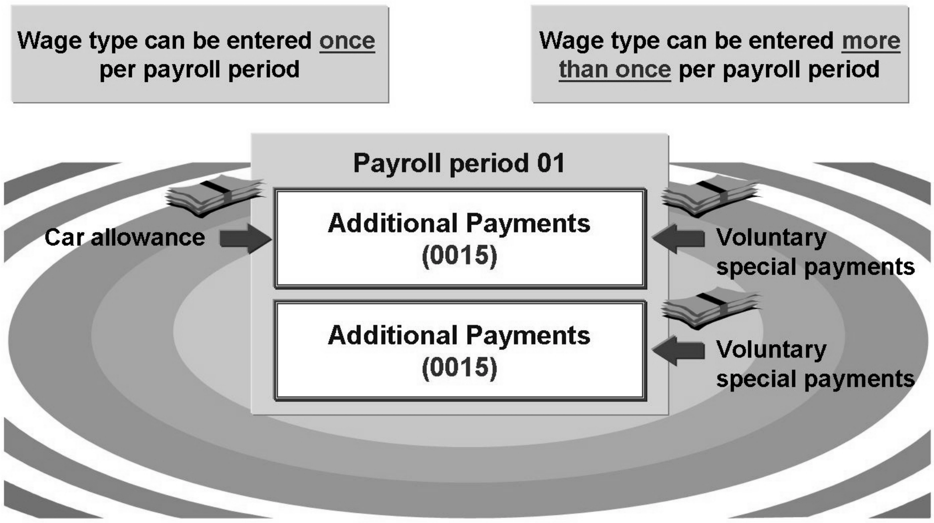

Figure 253: Input Frequency for Wage Types in Infotypes

When you simply configure a wage type, you can determine whether it can be entered **once** or **more than once** per payroll period.

Permissibility of Wage Types for Certain Employee Subgroups / Personnel Subareas

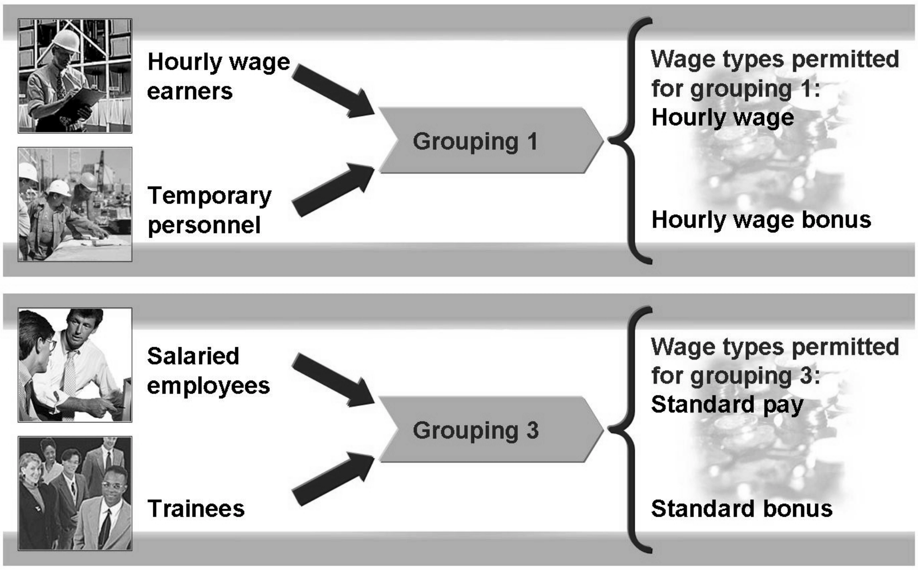

Figure 254: Employee Subgroup Grouping for Primary Wage Type

You can use personnel subarea groupings for primary wage types to define wage type permissibility for a specific enterprise structure, or employee subgroup groupings for primary wage types to define wage type permissibility for a personnel structure.

- Defining employee subgroups for primary wage types means that you group your employee subgroups.
- You can use these groups to determine which wage types can be entered for which employees.

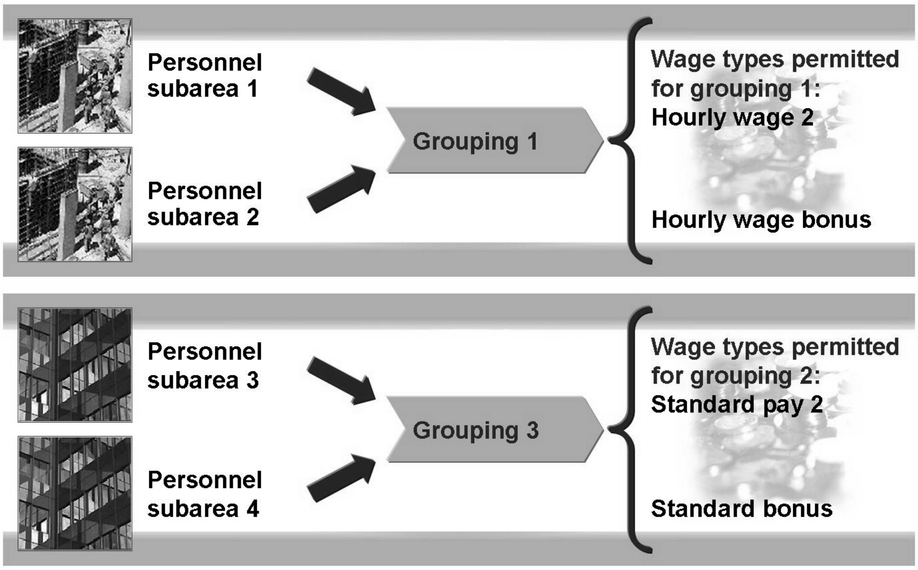

Figure 255: Personnel Subarea Groupings for Primary Wage Types

You can now also group your personnel subareas. This enables you to control the wage type permissibility for each personnel subarea.

When you group your personnel subareas, you can use both employee subgroups and personnel subareas as the grouping basis, or you can limit yourself to one of the options.

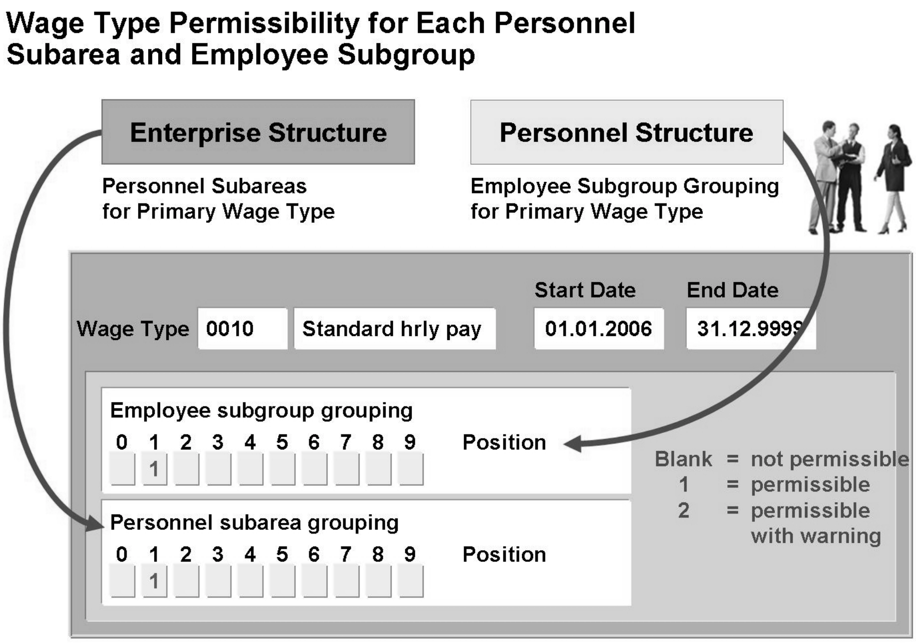

Figure 256: Wage Type Permissibility for Each Personnel Subarea and Employee Subgroup

In the last step, you specify whether a wage type is permissible for your personnel subarea grouping and your employee subgroup grouping. You can use the criterion Personnel Structure **and/or** the criterion Enterprise Structure.

423

Exercise 23: Setting Up Wage Types

Exercise Duration: 20 Minutes

Exercise Objectives

After completing this exercise, you will be able to:

- Set up customer wage types

Business Example

The SAP system contains a number of model wage types. You must copy these wage types, as productive systems can only use customer-specific wage types. In the following exercises, you will set up three wage types, which you will use for your employees in the Basic Pay infotype (0008).

Task 1:

1. Process the wage type catalog in the IMG: Copy the *Standard hourly pay (MM10)*, the *Standard Bonus (MM20)*, and the *Performance Bonus (%) (MM30)* to create customer wage types that start with your group number (*##10*, *##20*, and *##30*). Enter a text for the new wage types that includes your group number.

   When you create a copy, the system displays all tables that are affected. Record these:

   ________________________ ________________________

   ________________________ ________________________

   ________________________ ________________________

   ________________________ ________________________

   ________________________ ________________________

2. Check the wage type group for *Basic Pay* to ensure that it contains your new wage types. Check the wage type text too, so you can make changes to it if necessary.

3. Check the entry permissibility of your wage types for the *Basic Pay infotype*. Why are your wage types already permitted for this infotype?

   ____

   ____

Continued on next page

4. Check to see which employee subgroup grouping for primary wage types is assigned to your employee subgroup. Record this information:
5. Make sure that no grouping for primary wage types is assigned to your personnel subarea 0004 in personnel area PA##.
6. Ensure that the *permissibility of each wage type for each personnel subarea and employee subgroup* has been set up correctly for your copied wage types. These wage types should be permitted for the employee assigned to personnel subarea 0004 in personnel area PA##, and to employee subgroup ##.

Task 2:

The following exercises are optional

1. Create 5 copies of wage type MM10. Use the option of copying wage types to do so.

   Your wage types should have the following numbers: ##60, ##62, ##64, ##66 and ##68. Choose a name of your choice that contains your group number. Then exit the wage type copier.
2. You later realize that there is a typing error in the name of wage type ##62. You need to correct this error.

Solution 23: Setting Up Wage Types

Task 1:

1. Process the wage type catalog in the IMG: Copy the *Standard hourly pay (MM10)*, the *Standard Bonus (MM20)*, and the *Performance Bonus (%) (MM30)* to create customer wage types that start with your group number (*##10*, *##20*, and *##30*). Enter a text for the new wage types that includes your group number.

   When you create a copy, the system displays all tables that are affected. Record these:

   ________________________ ________________________

   ________________________ ________________________

   ________________________ ________________________

   ________________________ ________________________

Continued on next page

a) *IMG*: *Personnel Management → Personnel Administration → Payroll Data → Basic Pay → Wage Types → Create Wage Type Catalog*.

b) In the *Wage Type Maintenance* dialog box, select the *Copy* function.

c) Create the following entries. Hint: If you choose *Enter* after each entry, the text is copied automatically.

OWType	CWType	Wage type long text	Short text
MM10	##10	Standard hourly pay ##	Std. pay
MM20	##20	Standard bonus ##	Std. bon.
MM30	##30	Performance bonus ##	Perf.bon##

d) Remove the *Test run* indicator.

e) Select the three wage types to be copied, and choose *Copy*.

f) When you create a copy, the system displays all tables that are affected. Record these:

g) The affected tables are displayed in the log:

T511 Wage Types

T512T Wage type texts

T512W Wage type valuation

T512Z Permissibility of wage types per infotype

T52D7 Assignment of wage types to wage type groups

T52DZ Assign Customizing - Model Wage Type

T52EZ Time dependency of Payroll wage type posting

T539J Base wage type valuation

h) Return to the IMG.

Continued on next page

2. Check the wage type group for *Basic Pay* to ensure that it contains your new wage types. Check the wage type text too, so you can make changes to it if necessary.

   a) *IMG*: *Personnel Management → Personnel Administration → Payroll Data → Basic Pay → Wage Types → Check Wage Type Group 'Basic Pay'*.

   b) Check the entries for your wage types *##10*, *##20*, *##30*.

   c) *IMG*: *Personnel Management → Personnel Administration → Payroll Data → Basic Pay → Wage Types → Check Wage Type Catalog → Check Wage Type Text*

   d) Here, you can still make changes to the wage type text.

   e) Return to the IMG.

3. Check the entry permissibility of your wage types for the *Basic Pay infotype*. Why are your wage types already permitted for this infotype?

   ____

   ____

   a) *IMG*: *Personnel Management → Personnel Administration → Payroll Data → Basic Pay → Wage Types → Check Wage Type Catalog → Check entry permissibility per infotype*

   b) Why are your wage types already permitted for this infotype?

   c) As the reference wage types are already in this table, so are your own wage types (in other words, they are ready for input) (table T512Z).

4. Check to see which employee subgroup grouping for primary wage types is assigned to your employee subgroup. Record this information:

   a) Answer: **1**

   b) *IMG*: *Personnel Management → Personnel Administration → Payroll Data → Basic Pay → Wage Types → Employee Subgroups for Primary Wage Type*

   c) In the *Determine Work Area: Entry* dialog box, enter your country grouping.

   d) Select *Continue*.

   e) Ensure that the *EE subgroup grouping 1* (hourly paid) is assigned to your *Employee subgroup (##)* from the *active employee group (1)*.

   f) Save your data and return to the IMG.

Continued on next page

5. Make sure that no grouping for primary wage types is assigned to your personnel subarea 0004 in personnel area PA##.

   a) *IMG*: *Personnel Management → Personnel Administration → Payroll Data → Basic Pay → Wage Types → Employee Subgroups for Primary Wage Type*

   b) Check the data and return to the IMG.

6. Ensure that the *permissibility of each wage type for each personnel subarea and employee subgroup* has been set up correctly for your copied wage types. These wage types should be permitted for the employee assigned to personnel subarea 0004 in personnel area PA##, and to employee subgroup ##.

   a) *IMG*: *Personnel Management → Personnel Administration → Payroll Data → Basic Pay → Wage Types → Check Wage Type Catalog → Determine Wage Type Permissibility for each PS and ESG*

   b) Select wage types ##10, ##20, and ##30, and choose *Details*. For each of your wage types, use *Next entry* to check that 1 is valid for the employee subgroup grouping. In other words, check that each wage type has the number 1 assigned to it.

   c) Return to the IMG.

Task 2:

The following exercises are optional

1. Create 5 copies of wage type MM10. Use the option of copying wage types to do so.

Continued on next page

Your wage types should have the following numbers: ##60, ##62, ##64, ##66 and ##68. Choose a name of your choice that contains your group number. Then exit the wage type copier.

a) *IMG*: *Personnel Management → Personnel Administration → Payroll Data → Basic Pay → Wage Types → Create Wage Type Catalog*.

b) In the *Wage Type Maintenance* dialog box, select the *Copy* function.

c) Select *Continue*.

d) Select wage type *MM10* and choose *Copy 1 WT*.

e) Your wage types should have the following numbers: ##60, ##62, ##64, ##66, and ##68.

f) In the dialog box that appears, enter the value *##60* in the *Wage type starts at* field, the value *5* in the *Number of wage types* field, and the value *2* in the *Increase each step* field.

g) Choose a name of your choice that contains your group number. Correct the names in the tables shown.

h) Deactivate the *Test run* option and choose *Copy*

i) Then exit the wage type copier.

2. You later realize that there is a typing error in the name of wage type ##62. You need to correct this error.

a) *IMG*: *Personnel Management → Personnel Administration → Payroll Data → Basic Pay → Wage Types → Check Wage Type Catalog → Check Wage Type Text*

b) Correct the text and save your changes.

Lesson Summary

You should now be able to:

- Explain the meaning of wage types in SAP
- Copy wage types and know what one must pay attention to when copying wage types
- Identify the control indicators that are used to determine to whom the wage type can be assigned, when it can be assigned, and how often.

Lesson: Wage Type Characteristics

431

Lesson Duration: 120 Minutes

Lesson Overview

- Dialog characteristics of wage types
- Indirect valuation

Lesson Objectives

After completing this lesson, you will be able to:

- Specify the dialog characteristics of the wage types
- Know how wage types can be valuated indirectly by the system

Further information can be found in the Instructor Guide in SAPNet.

Business Example

In your company, you should modify the dialog characteristics of the copied wage types or the requirements of your company.

An indirect valuation of the wage types is also necessary.

Wage Type Characteristics

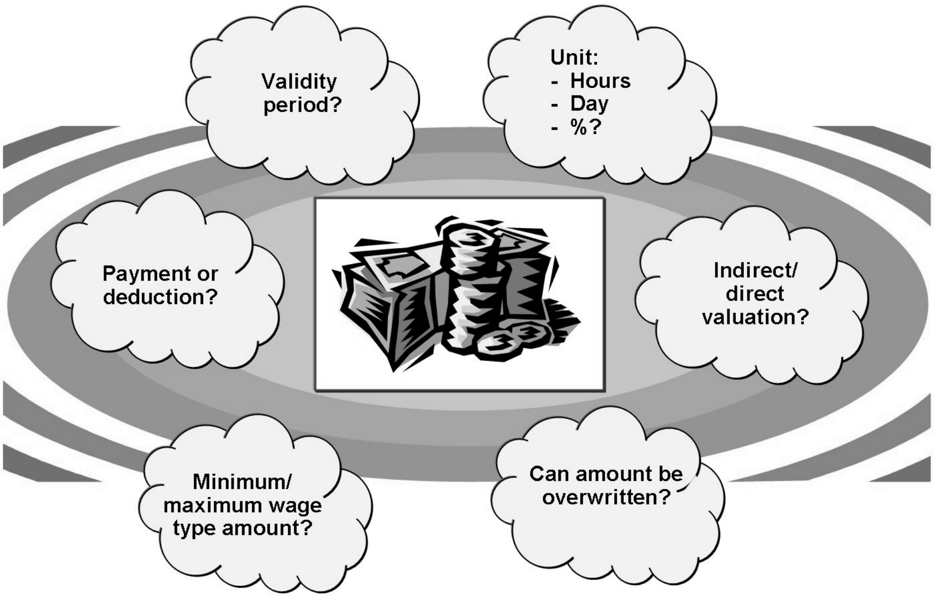

Figure 257: Checking Wage Type Characteristics

You can define the following wage type characteristics:

- Validity period
- Operation indicator
- Minimum and maximum wage type amount, if applicable
- Whether or not the wage type amount should be included in the basic pay total
- Default units of time/measurement, minimum and maximum number
- Input combinations for number and amount
- Indirect valuation and its characteristics

If you intend to implement the HCM Personnel Time Management component, you must also define the wage type as a bonus or a basic hourly pay wage type.

Indirect Valuation of Wage Types

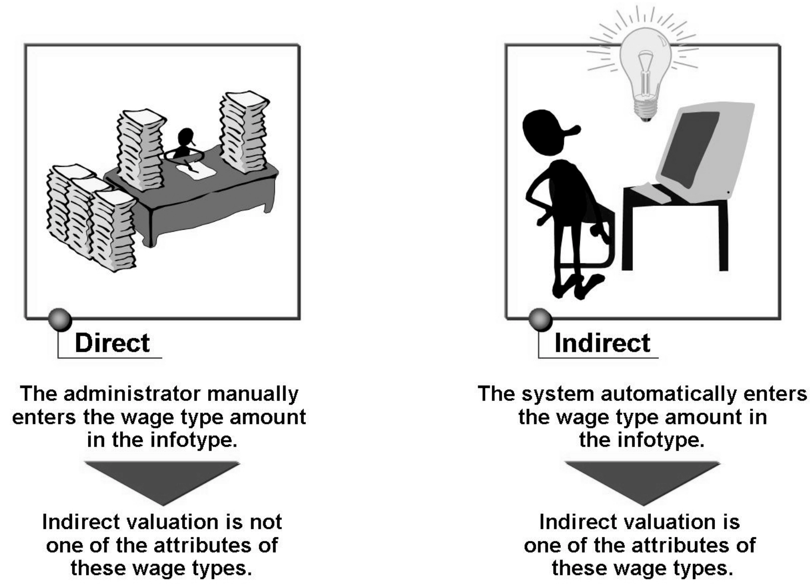

Figure 258: Valuation of Wage Types

Direct valuation:

- The amount that is to be used to valuate the wage type, is entered in the infotype manually.

Indirect valuation:

- The system automatically calculates the wage type amount and enters it in the infotype. In this case, the system imports and calculates the wage type amount from the table and you do not have to enter it manually. If the valuation table changes, the system automatically changes the HR master data record in accordance with the start or end date. This avoids mass data changes.
- The system can perform indirect valuation for the following infotypes:
  - Basic Pay (0008)
  - Recurring Payments/Deductions (0014)
  - Additional Payments (0015).

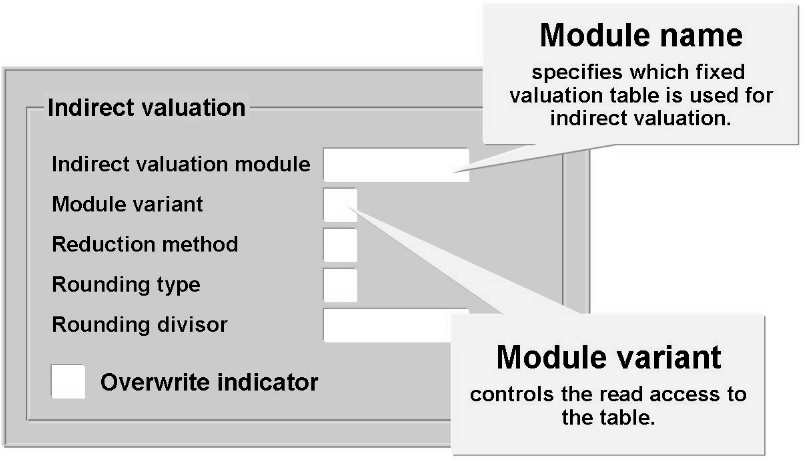

Figure 259: Indirect Valuation Using the Rule for Wage Type Characteristics

You can indirectly valuate a wage type by specifying a module name and variant.

Indirect valuation means that the system reads the amount from a table and you do not have to enter it manually in the infotype.

You define the valuation rule centrally, which means that you do not have to change master data records when you change the valuation.

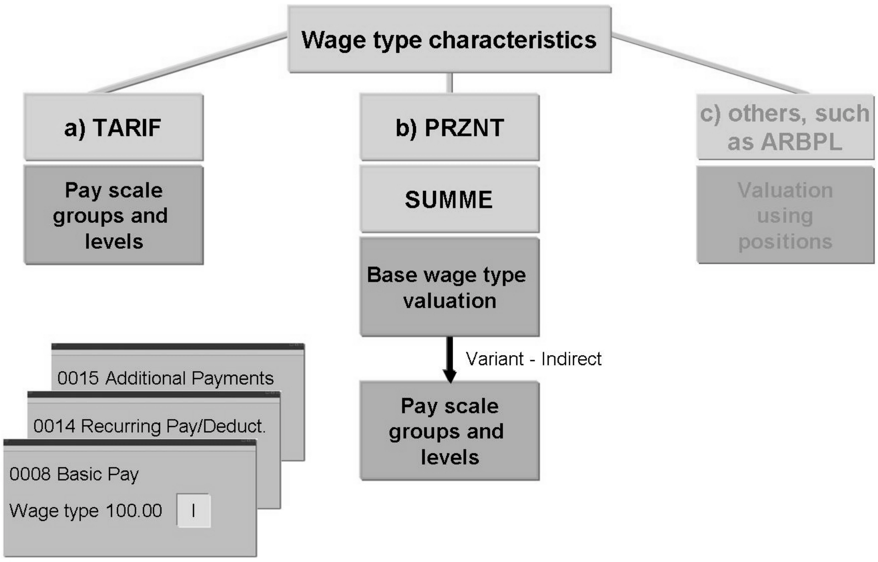

Figure 260: Module for Wage Type Characteristics (Indirect Valuation)

Different modules read different valuation tables. Explanation of the individual modules:

As of Release 4.6C, you can

- Adapt SAP standard modules to meet your enterprise-specific requirements
- Create your own modules with specific calculation guidelines

You can use the following tools:

- *Indirect Valuation Modules* table (T511V_M)
- Here, you can define your own customer-specific module
- Business Add-In (BAdI) HR: *Indirect Valuation of Wage Types* (HR_INDVAL).
- This BAdI creates or changes the calculation guideline for an indirect valuation module.

You can find further information in the Implementation Guide (IMG) for *Personnel Administration* under

Payroll Data → Indirect Valuation.

TARIF Module

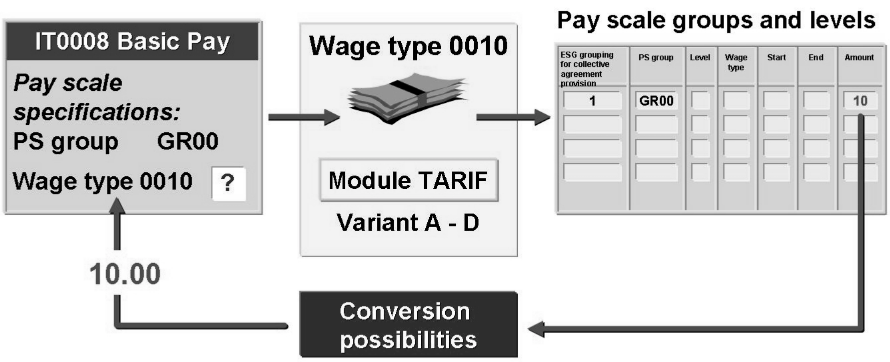

Figure 261: a) TARIF Module

When you enter a wage type in an infotype, the system reads the valuation module and variant assigned to it in the Wage Type Characteristics table.

The “TARIF” module uses pay scale data that is takes from the pay scale groups and pay scale levels you entered in the Basic Pay infotype.

You can use a conversion procedure to change this amount.

Pay Scale Groups and Levels

Module	Variant	Employee subgroup grouping for coll.agrmt.prov	Pay scale group	Pay scale level	Wage type	Amount
Pay scale	A	X	X	(X)	-	X
Pay scale	B	X	X	(X)	X	X
Pay scale	C	X	X	-	X	X
Pay scale	D	X	-	-	X	X

X = Required entry
\- = Entry must not exist
(X) = Entry can exist

Figure 262: Indirect Valuation Using the TARIF Module

Module variants control the type of table access, that is, which table fields the system reads.

The module TARIF has four variants (A - D), which have the following meaning:

- **A** Valuation is based on the pay scale group and level
- **B** Valuation is based on pay scale group/level and specific wage type
- **C** Valuation does not depend on pay scale level
- **D** Valuation does not depend on pay scale group or level

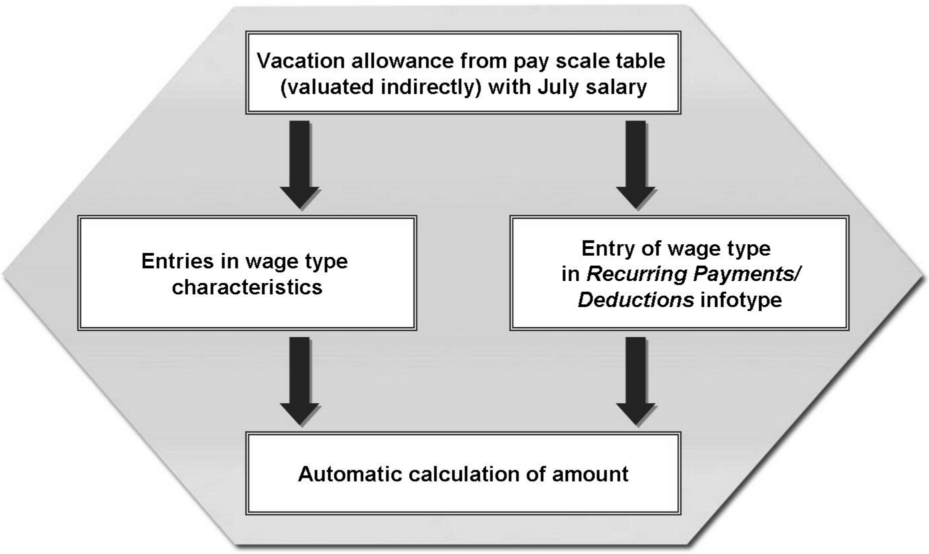

Figure 263: TARIF Module in "Recurring Payments/Deductions" Infotype

You can use modules for indirect valuation in other infotypes.

The example in the graphic shows how indirect valuation in the "Recurring Payments/Deductions" infotype helps determine how much vacation allowance an employee should receive.

PRZNT and SUMME Module

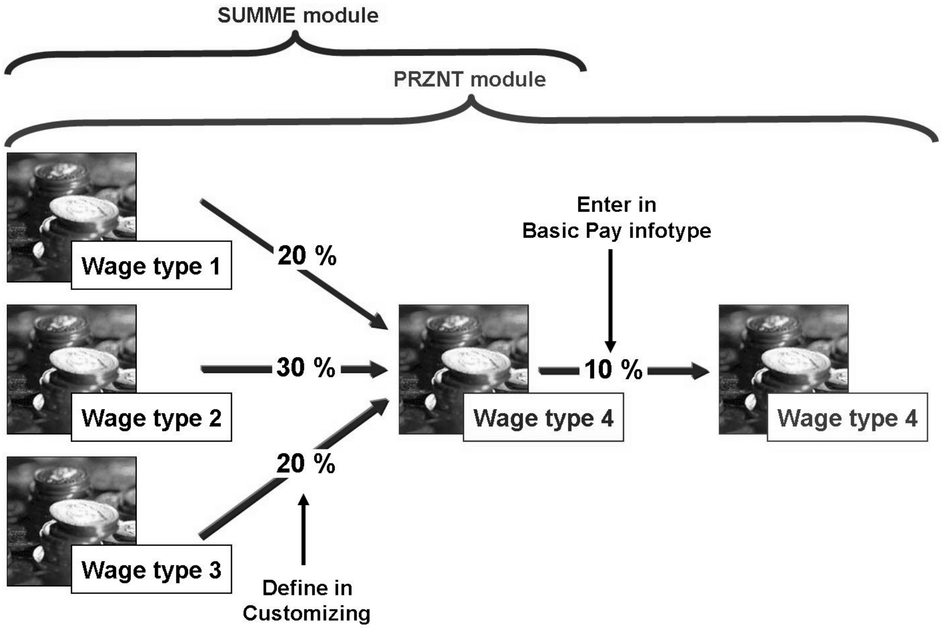

Figure 264: b) PRZNT/SUMME Module

The system calculates certain wage types as a percentage of other wage types.

You can use two modules for indirect valuation. Both of these modules are based on how you set up the Base Wage Type Valuation table.

In the IMG structure, choose:
Personnel Management → Personnel Administration → Payroll Data → Basic Pay → Wage Types → Define valuation of base wage types

In the above example, either one of the following applies:

- **SUMME**
  The amount for wage type 4 should consist of 20% of wage type 1, 30% of wage type 2, and 20% of wage type 3.
- **PRZNT**
  The amount for wage type 4 should now consist of 20% of wage type 1, 30% of wage type 2, and 20% of wage type 3. In addition, the system should also multiply this amount by a percentage you enter in the Basic Pay infotype, in this case, 10%.

Base Wage Type Valuation

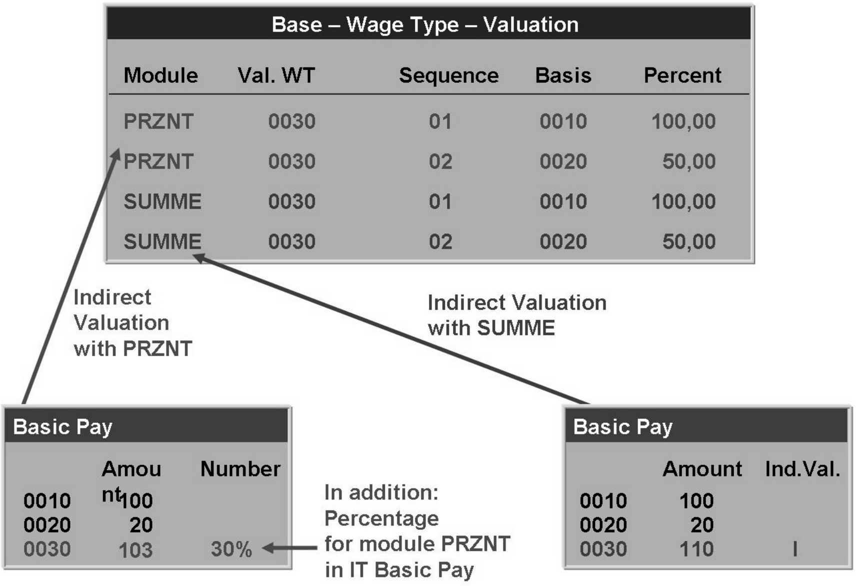

Figure 265: Base Wage Type Valuation

The system calculates certain wage types as a percentage of other wage types.

You can link the wage type to be valuated with several base wage types in the Base Wage Type Valuation table.

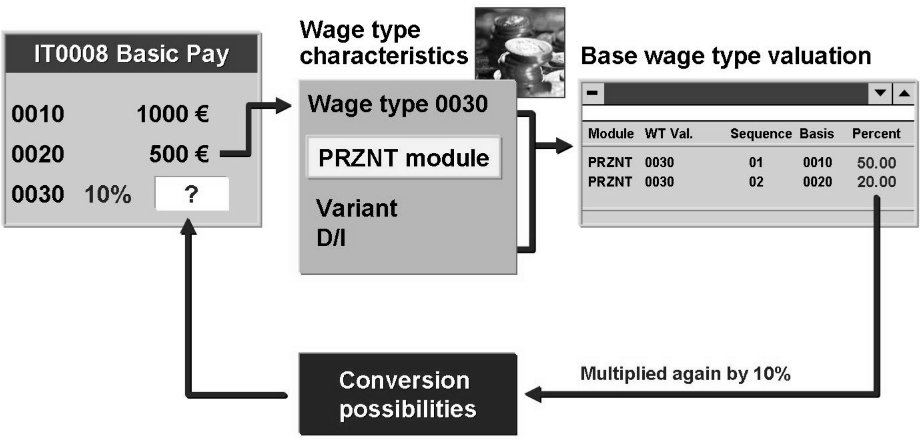

Figure 266: Indirect Valuation Using the PRZNT Module

In Define Valuation of Base Wage Types, you must specify which wage types the system is to use to calculate the percentage bonus (PRZNT). A distinction is made between **direct** and **indirect** variants.

- In the **direct** variant, you must enter the wage types the system is to use as a valuation basis in the infotype, otherwise, the system does not consider them. Furthermore, the amount of the wage type to be valuated is dependent on how high the amounts of the base wage type in the Basic Pay infotype are. This is because you can also overwrite the default amounts for indirectly valuated base wage types.
- Ín the **indirect** variant, the relevant wage types must not be in the infotype. The system determines the value internally, and uses it as the basis for additional calculations. This means that the base wage types must be valuated indirectly so that the system can read amounts from a pay scale table, for example.

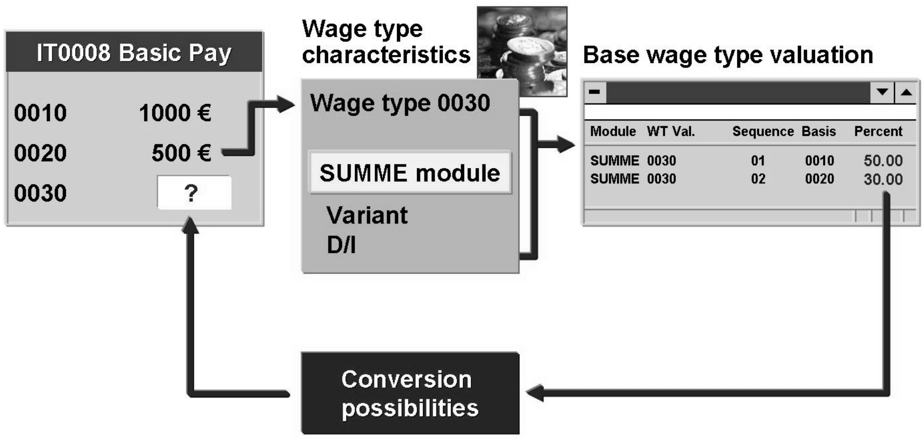

Figure 267: Indirect Valuation Using the SUMME Module

When making an indirect valuation using the SUMMER module, you must define which wage types the system is to use to calculate the percentage bonus (SUMME). A distinction is also made between direct and indirect variants.

In the direct variant, you must enter the wage types the system is to use as a valuation basis in the infotype, otherwise, the system does not consider them.

In the indirect variant, the relevant wage types must not be in the infotype.

Unlike the PRZNT module, you enter the percentage value in the SUMME module in the table as a fixed value, and it is therefore linked to the wage type.

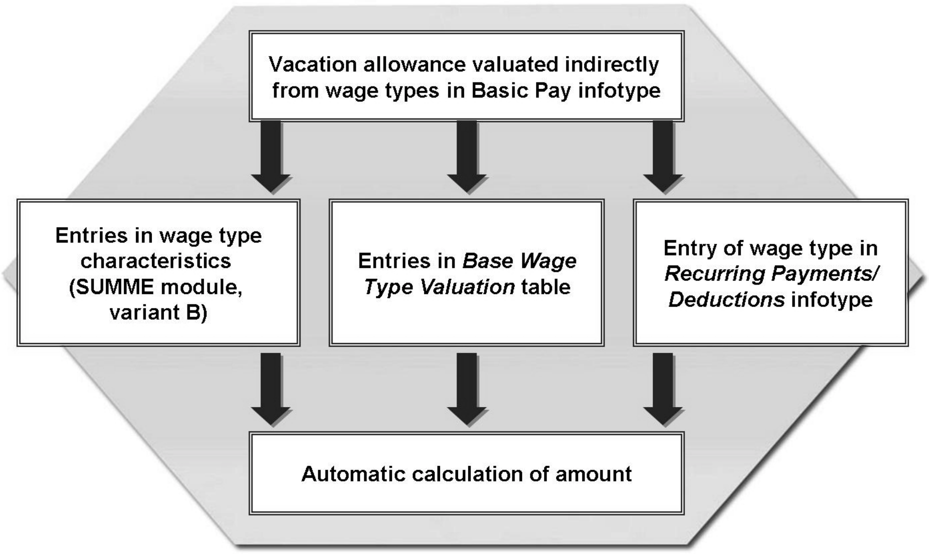

Figure 268: SUMME Module in "Recurring Payments/Deductions" Infotype

You can use the "SUMME" module for indirect valuation in other infotypes.

The example in the graphic shows how indirect valuation in the "Recurring Payments/Deductions" infotype helps determine how much vacation allowance an employee should receive. In this case, you use the SUMME module and module variant B.

You must also store the type of calculation in the "Basic Wage Type Valuation" table.

Overview: Indirect Valuation

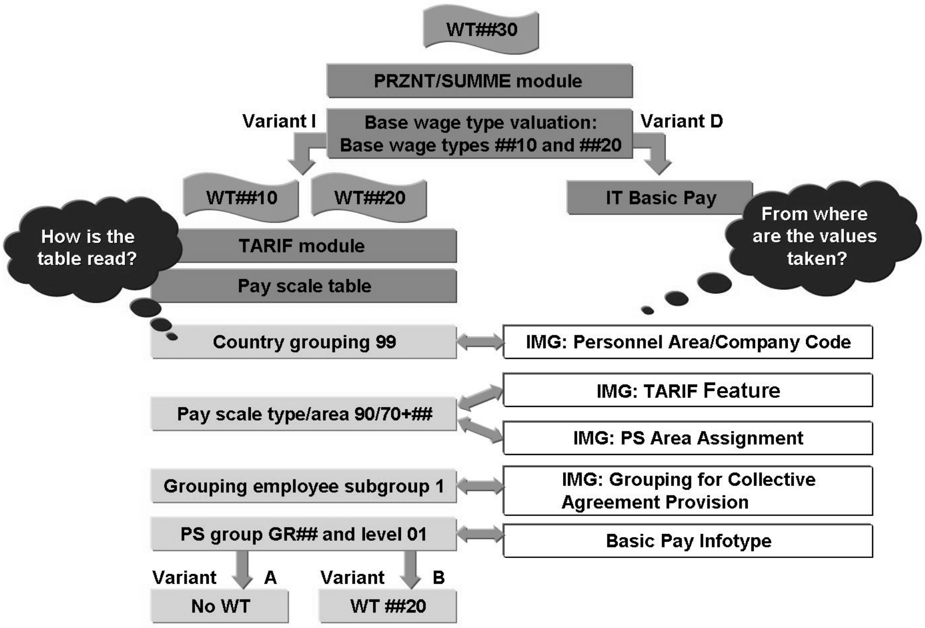

Figure 269: Course Examples of Indirect Valuation

This is how the individual modules are implemented for the basis of our exercise:

- Wage types **##10** and **##20** are both coded with feature TARIF in the wage type characteristics. This allows the system to access the pay scale table, from where it reads these wage types with the data already assigned to the employee.
- You assign this data in the following Customizing steps:
  - *Enterprise Structure → Assignment → Human Resources Management → Assignment of Personnel Area to Company Code*
  - *Personnel Management → Personnel Administration → Payroll Data → Basic Pay → Determine default for Pay Scale Area* or *Check Assignment of Pay Scale Structure to Company Structure*
  - *Personnel Management → Personnel Administration → Payroll Data → Basic Pay → Define EE Subgroup Grouping for PCR and Coll.Agrmt.Prov.*

The system reads each of these wage types differently. Wage type ##10 is encoded with variant A, while wage type ##20 is encoded with variant B. This means that the system will look in the pay scale table for the entry for wage type ##10 that does not have a maintained wage type. On the other hand, it will also look in the same table for the entry for wage type ##20 that has this *wage type* in the Wage type column.

Wage type **##30** should consist of base wage types ##10 and ##20. The Base Wage Type Valuation table determines the percentage rates of the two base wage types used to make up wage type ##30. The amounts depend on the variant used: For variant I (indirect), the base wage types must be valuated indirectly. In other words, the system reads the amounts from the pay scale table, for example. For variant D (direct), however, the system reads the amounts for base wage types from the Basic Pay infotype. In other words, the amount for wage type ##30 is dependent on any amounts that have been recorded for base wage types in this infotype.

ARBPL Module

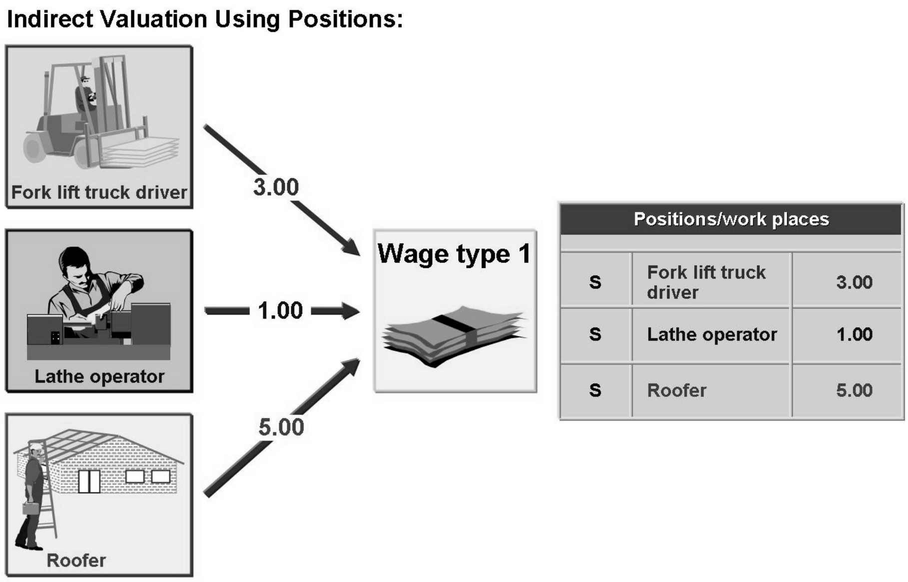

Figure 270: c) ARBPL Module

The indirect valuation module **ARBPL** uses the object type and the position number entered in infotype 0001 to calculate the wage type amount.

If module ARBPL is used with variant S (position) to valuate, the system bases its calculations on the position entered in the Organizational Assignment infotype (0001) and the country grouping in the “Position” table. You can enter a payment for the position in this table.

To access the position catalog, use the menu path described below in the IMG structure:

- *Personnel Management → Personnel Administration → Payroll Data → Basic Pay → Wage Types → Determine indirect valuation for positions/workcenters*

Indirect Valuation: Additional Attributes

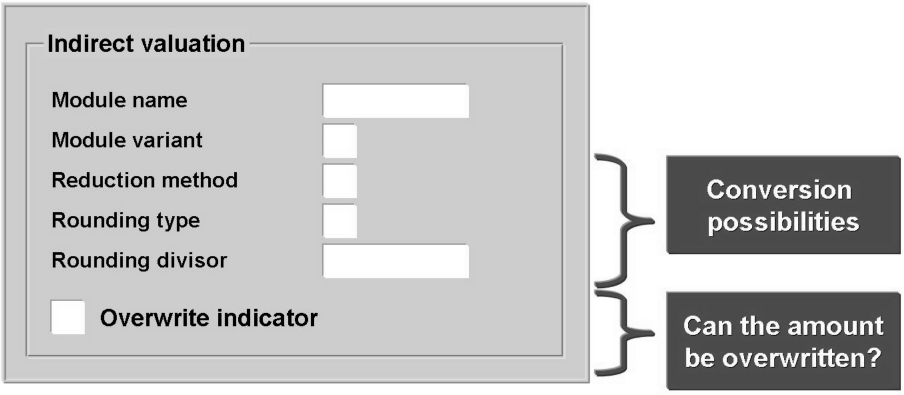

Figure 271: Indirect Valuation: Additional Attributes

In addition to the module name and defining module variants, you can enter additional attributes. For example:

Reduction method:: The values are defined as follows:

Blank or 1: No reduction

2: Reduction using the capacity utilization level (%) stored in infotype 0008

3: Reduction in accordance with the relationship between the individual weekly working time, and the standard weekly working time

4: Reduction based on the relationship between the individual hours per week taken from infotype 0007 and the standard weekly working time

5: Reduction in accordance with the relationship between the individual weekly working time minus the standard weekly working time, and the standard weekly working time

6: Reduction based on the relationship between the hours per week taken from infotype 0007 minus the standard weekly working time, and the standard weekly working time

Rounding type: A = amount is rounded down, B = amount is rounded up/down, C = amount is rounded up

Rounding divisor: Values 0 - 999999. For example, 100 means that the amount should be rounded up to a whole euro, dollar, and so on.

Overwrite indicator: Determines whether you can overwrite the wage type amount in the infotype.

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Exercise 24: Wage Type Characteristics

Exercise Duration: 25 Minutes

Exercise Objectives

After completing this exercise, you will be able to:

- Defining wage type characteristics

Business Example

You must now define your wage type characteristics. For each of your wage types, you must define the correct module name, the correct module variant, and the reduction method for indirect valuation.

Task 1:

1. What is the difference between the TARIF module and the PRZNT module?

   ____
   ____
   ____
   ____

2. What do the module variants do?

   ____
   ____
   ____
   ____

3. Wage type ##10 should be valuated so that the wage type amount is read from the pay scale table (module ____________). The system should read the entry that has no entry in the Wage type column (variant ___). Make the appropriate entries in the wage type characteristics in the system.
   Fill in the blanks to complete the sentence.

Continued on next page

4. Wage type ##20 should be valuated so that the wage type amount is read from the pay scale table (____________ module). The entry that is created for this wage type in the pay scale table should be read (variant ___). Make the appropriate entries in the wage type characteristics in the system.
   Fill in the blanks to complete the sentence.

5. In the pay scale table, create entries for your new bonus wage type (##20) for each of your pay scale levels in pay scale group GR##.

6. Wage type ##30 should be valuated so that the amount is calculated as a percentage from base wage types ##10 and ##20. In addition, the amount in this wage type should be multiplied again by a percentage rate when entered in the Basic Pay infotype (module _______________).

   The wage type amount should be kept separate from the actual base wage type amounts in the Basic Pay infotype. In other words, the system should read the amounts from the pay scale table (variant ____________).

   The wage type amount should also be rounded up or down to the nearest whole figure (EURO).

   Make the appropriate entries in the wage type characteristics in the system.

7. Define the base wage type valuation for the *Performance Bonus (##30)* wage type. This valuation should consist of *50%* of base wage type **##10**, and *100%* of base wage type **##20**.

Task 2:

Optional exercises:

1. When you enter the amount for wage type ##30 in the Basic Pay infotype, it should be calculated as follows:

   - 20% of wage type amount ##10 and
   - 70% of wage type amount ##20.

   You want the amount in the Basic Pay infotype not to be influenced by the entry of a percentage.

   The wage type amount should be calculated independently of the percentage stored (if any) for the base wage types.

   As a precaution, create the Basic Pay infotype one more time. Enter your wage types again, and leave the infotype WITHOUT saving.

Continued on next page

2. When you enter the amount of wage type 40## for your employee 305991## in the Recurring Payments/Deductions infotype, it is taken from the pay scale table. In this process, the amount for which the wage type is not filled should be taken into account.

   Create a record for the Recurring Payments/Deductions infotype and assign wage type 40##. What happens when you choose Enter?

Solution 24: Wage Type Characteristics

Task 1:

1. What is the difference between the TARIF module and the PRZNT module?

   Answer: For all wage types valuated with the TARIF module, the system reads the amount from the pay scale table depending on the pay scale group and level.

   For all wage types valuated with the PRZNT module, the system calculates the amount from the amounts of the base wage types. The calculated amount is multiplied by a percentage, which is entered in dialog while maintaining the Basic Pay infotype.

2. What do the module variants do?

   Answer: The module variant specifies the module for indirect valuation and controls how the read access should be assigned for a table.

3. Wage type ##10 should be valuated so that the wage type amount is read from the pay scale table (module TARIF). The system should read the entry that has no entry in the Wage type column (variant A). Make the appropriate entries in the wage type characteristics in the system.

   Answer: TARIF, A

   IMG: *Personnel Management → Personnel Administration → Payroll Data → Basic Pay → Wage Types → Check Wage Type Catalog → Check Wage Type Characteristics*

   Select the wage type *##10*.

   Choose *Details*.

   Make the following entries:

   - Amount: +
   - Number/Unit: -
   - Indirect valuation module: *TARIF*
   - Module variant: *A*

   Save your entries.

Continued on next page

4. Wage type ##20 should be valuated so that the wage type amount is read from the pay scale table (TARIF module). The entry that is created for this wage type in the pay scale table should be read (variant B).Make the appropriate entries in the wage type characteristics in the system.

   Answer: TARIF, B,

   IMG: *Personnel Management → Personnel Administration → Payroll Data → Basic Pay → Wage Types → Check Wage Type Catalog → Check Wage Type Characteristics*

   Select the wage type *##20*.

   Choose *Details*.

   Make the following entries:

   - Amount: +
   - Number/Unit: -
   - Indirect valuation module: *TARIF*
   - Module variant: *B*

   Save your entries.

Continued on next page

5. In the pay scale table, create entries for your new bonus wage type (##20) for each of your pay scale levels in pay scale group GR##.

   a) *Personnel Management → Personnel Administration → Payroll Data → Basic Pay → Revise Pay Scale Groups and Levels*

   b) In the Determine Work Area: Entry dialog box, enter your country grouping *99*, pay scale type *90* and pay scale area *70+##* .

   c) Select the entries *GR##.*

   d) Select *Copy as*.

   e) Add the following table entries with wage type *##20*:

Grpg	PS group	Lv.	Wage type	Start date	End date	Amount
1	GR##	01	##20	01.01.2006	31.12.9999	Your choice
1	GR##	02	##20	01.01.2006	31.12.9999	Your choice
1	GR##	03	##20	01.01.2006	31.12.9999	Your choice
1	GR##	04	##20	01.01.2006	31.12.9999	Your choice

   f) Save your data and return to the IMG.

Hint: Maintain the entries for the annual salary if this is necessary for your country **(not for Germany)**:

IMG: *Personnel Management → Personnel Administration → Payroll Data → Basic Pay → Define annual salary*.

In the *Choose activity* dialog box, select the action *Relevant wage types for annual salary valuation*.

Val. WT	No.	Start date	End date	Base WT	Per- cent
ANSAL	##+10	01.01.1990	31.12.9999	##10	100,00

6. Wage type ##30 should be valuated so that the amount is calculated as a percentage from base wage types ##10 and ##20. In addition, the amount in this wage type should be multiplied again by a percentage rate when entered in the Basic Pay infotype (module _______________).

Continued on next page

The wage type amount should be kept separate from the actual base wage type amounts in the Basic Pay infotype. In other words, the system should read the amounts from the pay scale table (variant ____________).

The wage type amount should also be rounded up or down to the nearest whole figure (EURO).

Make the appropriate entries in the wage type characteristics in the system.

a) **PRZNT** module

b) Variant **I (indirect)**

c) IMG: *Personnel Management → Personnel Administration → Payroll Data → Basic Pay → Wage Types → Check Wage Type Catalog → Check Wage Type Characteristics*

d) Select wage type ##30.

e) Choose Details.

f) Make the following entries:

- Amount: -
- Number/Unit: +
- Time unit/meas: *Percent*
- Indirect valuation module: *PRZNT*
- Module variant: *I*
- Rounding type: *B*
- Rounding divisor: *100*

g) Save your entries.

7. Define the base wage type valuation for the *Performance Bonus (##30)* wage type. This valuation should consist of *50%* of base wage type **##10**, and *100%* of base wage type **##20**.

a) *IMG*: *Personnel Management → Personnel Administration → Payroll Data → Basic Pay → Wage Types → Define valuation of base wage types*

b) Create the following entries:

Mod.	WT WT	No.	Start date	End date	Base WT	Percent
PRZNT	##30	1	01.01.2006	31.12.9999	##10	50,00
PRZNT	##30	2	01.01.2006	31.12.9999	##20	100,00

Save your data and return to the IMG.

Continued on next page

Task 2:

Optional exercises:

1. When you enter the amount for wage type ##30 in the Basic Pay infotype, it should be calculated as follows:

   - 20% of wage type amount ##10 and
   - 70% of wage type amount ##20.

   You want the amount in the Basic Pay infotype not to be influenced by the entry of a percentage.

   The wage type amount should be calculated independently of the percentage stored (if any) for the base wage types.

Continued on next page

As a precaution, create the Basic Pay infotype one more time. Enter your wage types again, and leave the infotype WITHOUT saving.

a) **Wage type characteristics:**

   IMG: *Personnel Management → Personnel Administration → Payroll Data → Basic Pay → Wage Types → Check Wage Type Catalog → Check Wage Type Characteristics*

b) Select the wage type *##30*.

c) Choose *Details*.

d) Make the following entries:

   - Amount: -
   - Number/unit: -
   - Time unit/meas.: *empty*
   - Indirect valuation module: *SUMME*
   - Module variant: *D*

e) Save the data.

f) **Base Wage Type Valuation table:**

   IMG: *Personnel Management → Personnel Administration → Payroll Data → Basic Pay → Wage Types → Define valuation of base wage types*

g) Create the following entries:

Mod.	WT WT	No.	Start date	End date	Base WT	Percent
SUMME	##30	1	01.01.2006	31.12.9999	##10	20,00
SUMME	##30	2	01.01.2006	31.12.9999	##20	70,00

h) Save your data and return to the IMG.

i) Create a new Basic Pay infotype record, and assign your three wage types to it. Do not save this infotype yet.

2. When you enter the amount of wage type 40## for your employee 305991## in the Recurring Payments/Deductions infotype, it is taken from the pay scale table. In this process, the amount for which the wage type is not filled should be taken into account.

Continued on next page

Create a record for the Recurring Payments/Deductions infotype and assign wage type 40##. What happens when you choose Enter?

a) When you enter the amount of wage type 40## in the Recurring Payments/Deductions infotype, it is taken from the pay scale table. In this process, the amount for which the wage type is not filled should be taken into account.

b) **Wage type characteristics:**

   IMG: *Personnel Management → Personnel Administration → Payroll Data → Recurring Payments/Deductions → Wage Types → Check Wage Type Catalog → Check Wage Type Characteristics*

c) Select wage type 40##

d) Choose *Details*

e) Make the following entries:

   - Amount: -
   - Number/Unit: -
   - Time unit/meas: *Leave blank*
   - Indirect valuation module: *TARIF*
   - Module variant: *A*

f) Save the data.

g) Create a record for the Recurring Payments/Deductions infotype and assign wage type 40##. What happens when you choose Enter?

h) Easy Access Menu:

   Human Resources → Personnel Management → Administration → HR Master Data

i) Choose Maintain.

j) Enter the personnel number 305991#.

k) Select the Recurring Payments/Deductions infotype and select Create

l) Choose 1st of this month in the Valid field

m) Enter 40## in the Wage Type field

n) Select Enter.

o) The relevant value is taken from the pay scale table.

Lesson Summary

You should now be able to:

- Specify the dialog characteristics of the wage types
- Know how wage types can be valuated indirectly by the system

Lesson: Default Wage Types

455

Lesson Duration: 50 Minutes

Lesson Overview

Wage types should be automatically proposed in the Basic Pay infotype by the system.

Lesson Objectives

After completing this lesson, you will be able to:

- Set wage types as defaults for an employee with the help of the LGMST feature and a wage type model, depending on the enterprise and personnel structure

---

Further information can be found in the Instructor Guide in SAPNet.

Business Example

You should set up the system with Customizing settings so that wage types are automatically proposed in the Basic Pay infotype when hiring an employee.

Default Wage Types for the Basic Pay Infotype

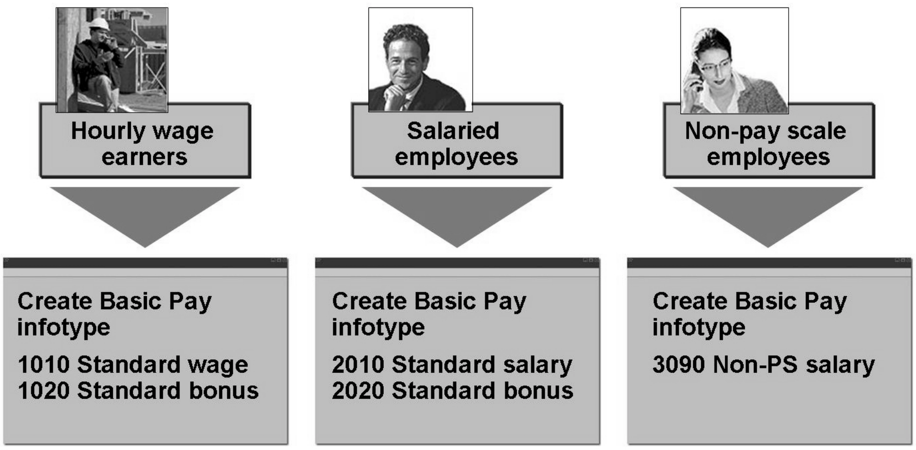

Figure 272: Default Wage Types for Basic Pay

If you want the system to suggest a default wage type for basic pay, this wage type must be included in a wage type model. The system suggests a wage type model based on an employee's organizational assignment. For example:

- Company code
- Personnel area
- Employee group
- Employee subgroup

The system uses this information to define a default for a wage type model.

LGMST Feature

To reduce the amount of routine work involved in creating a Basic Pay infotype record (0008), the system displays the default wage types for the administrator either as required or optional entries.

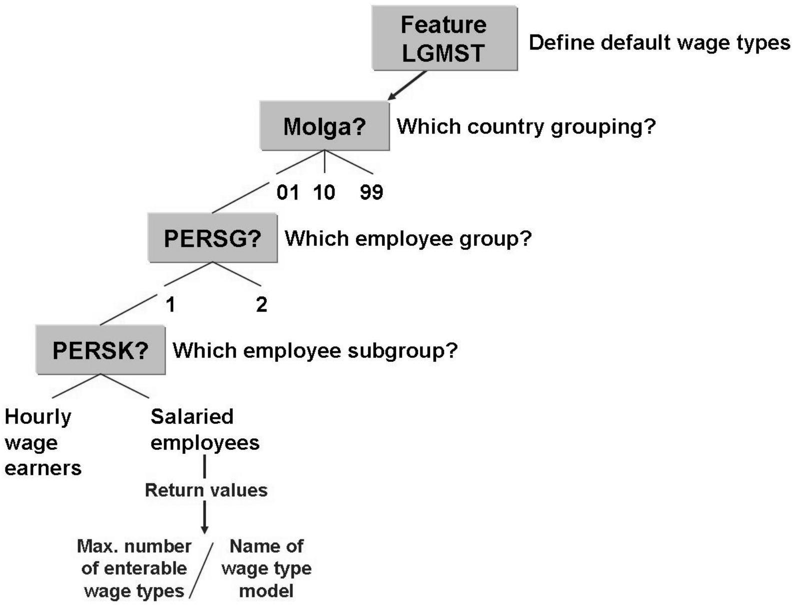

Figure 273: LGMST Feature

You can use the Default Wage Types for Basic Pay table to define default wage types for the Basic Pay infotype (0008).

An entry is accessed by processing a decision tree. The feature is called LGMST.

The LGMST feature has two return values: firstly, the maximum number of enterable wage types in the Basic Pay infotype, and secondly, the wage type model the system is to use.

Wage Type Model

Wage Type Model	Sequence	Mode	Wage Type
Model HRL Y00	1	F	0010
Model HRL Y00	2	F	0020
Model HRL Y00	3	O	0030

Figure 274: Defining Wage Type Models

In the wage type model, you define the sequence of the defaulted wage types and whether you can overwrite the defaulted wage type (in the Mode field).

The IMG activity to do this is called “Revise Default Wage Types”.

459 Exercise 25: Default Wage Types

Exercise Duration: 15 Minutes

Exercise Objectives

After completing this exercise, you will be able to:

- Defining default wage types

Business Example

Finally, you want the system to propose wage types independently of the employee's organizational assignment. This would mean that you no longer have to enter wage types manually in the Basic Pay infotype.

Task 1:

1. Define a wage type model with the naming convention HRLY##. This should contain your three new customer wage types. The system should propose the wage types so that they can be removed from the Basic Pay infotype at any point in the future.

Task 2:

1. Check the LGMST feature in the IMG step: Enterprise Structure for Wage Type Model. What entry does the trainer have to make to ensure that your wage type model (HRLY##) is defaulted for your employee subgroup? A total of 5 wage types should be entered in the Basic Pay infotype.

   ____

   Hint: You do not need to make any changes in the *LGMST* feature.

2. Create a new *Basic Pay* (0008) infotype record for the personnel number 305992##. The system will now default your wage types.

   Enter your pay scale group and level, and choose *Enter*. The system will now calculate the amounts for your wage types too. You have now set up the infotype as required, and you can now *save* your entries.

Continued on next page

Task 3:

(optional)

1. Use the personnel file to check which infotypes have been created using this personnel action for employee 305992##.

Task 4:

(optional)

So far, you have set up the Basic Pay infotype. However, you require maximum control over the wage types in the Basic Pay infotype for your employee with personnel number 305992##:

1. The amounts for the wage types should be valuated indirectly, and should **not be able to be overwritten**.
2. The wage types should be defaulted permanently. In other words, these wage types cannot be changed or deleted.
3. The system should default three wage types only (##10, ##20, and ##30). You also should not be able to enter other wage types manually.
4. To check the Basic Pay infotype again, you must create a new record once more (as of the hiring date of your employee 305992##). This involves overwriting the infotypes you have already created.

Solution 25: Default Wage Types

Task 1:

1. Define a wage type model with the naming convention HRLY##. This should contain your three new customer wage types. The system should propose the wage types so that they can be removed from the Basic Pay infotype at any point in the future.

   a) *IMG: Personnel Management → Personnel Administration → Payroll Data → Basic Pay → Wage Types → Revise Default Wage Types*

   b) Choose *New entries*.

   c) Create the following entries:

Wage type model	Start date	End date	Seq. no.	Mode	Wage type
HRLY##	01.01.2006	31.12.9999	1	O	##10
HRLY##	01.01.2006	31.12.9999	2	O	##20
HRLY##	01.01.2006	31.12.9999	3	O	##30

   Save your data and return to the IMG.

Task 2:

1. Check the LGMST feature in the IMG step: Enterprise Structure for Wage Type Model. What entry does the trainer have to make to ensure that your wage type model (HRLY##) is defaulted for your employee subgroup? A total of 5 wage types should be entered in the Basic Pay infotype.

Continued on next page

Hint: You do not need to make any changes in the *LGMST* feature.

a) *IMG: Personnel Management → Personnel Administration → Payroll Data → Basic Pay → Wage Types → Enterprise structure for wage type model. The system displays the Process feature LGMST: decision tree screen*

b) *The system displays the Process feature LGMST: Decision tree* screen.

c) If you want to change the *LGMST feature* in tree maintenance, you must perform the following processing activities:

d) In country grouping *99*, search for the node *PERSK* and the employee group *ACTIVE*. Position the cursor on the *PERSK* node and select the function *Create nodes*. On the *Values for PERSK* screen, enter ## (## is your new employee subgroup). Then select *Transfer*.

e) Position the cursor on the new node (##) and select *Create* nodes. Accept the *Return value* default setting on the following screen and confirm by choosing Enter. Enter 05/HRLY## on the screen that then appears (*Return value for field value ##)*, and choose *Copy*.

f) After you have changed the *LGMST* feature, check the feature for errors.

g) The trainer will ***save* and *activate* the feature for you**.

2. Create a new *Basic Pay* (0008) infotype record for the personnel number 305992##. The system will now default your wage types.

   Enter your pay scale group and level, and choose *Enter*. The system will now calculate the amounts for your wage types too. You have now set up the infotype as required, and you can now *save* your entries.

   a) *Human Resources → Personnel Management → Administration → HR Master Data*

   b) Choose *Maintain*.

   c) Enter the personnel number *305992##.*

   d) Enter infotype 0008 and use the start of this month as the start date.

   e) Choose *Create*.

   f) Maintain the pay scale group and level.

   g) Choose *Enter*. The amounts are entered in the fields.

   h) Save your entries and return to the SAP Easy Access menu.

Continued on next page

Task 3:

(optional)

1. Use the personnel file to check which infotypes have been created using this personnel action for employee 305992##.

   a) *Human Resources → Personnel Management → Administration → HR Master Data → Personnel File*

   b) Enter the personnel number *305992##*.

   c) Choose *Display*.

   d) Check the infotypes using the *Next record* function.

   e) Return to the SAP Easy Access menu.

Task 4:

(optional)

So far, you have set up the Basic Pay infotype. However, you require maximum control over the wage types in the Basic Pay infotype for your employee with personnel number 305992##:

1. The amounts for the wage types should be valuated indirectly, and should **not be able to be overwritten**.

   a) *IMG: Personnel Management → Personnel Administration → Payroll Data → Basic Pay → Wage Types → Check Wage Type Catalog → Check Wage Type Characteristics*

   b) Select the wage type *##10*.

   c) Choose *Details*.

   d) Make the following entries:

      - Rewritable indicator: Remove the indicator

   e) Complete the steps above for wage types ##20 and ##30 too.

   f) Save your data and return to the IMG.

Continued on next page

2. The wage types should be defaulted permanently. In other words, these wage types cannot be changed or deleted.

   a) *IMG: Personnel Management → Personnel Administration → Payroll Data → Basic Pay → Wage Types → Revise Default Wage Types*

   b) Choose *New entries*.

   c) Change your entries so that mode F (fixed/permanent) is:

Wage type model	Start date	End date	Seq	Mode	Wage type
HRLY##	01.01.2006	31.12.9999	1	F	##10
HRLY##	01.01.2006	31.12.9999	2	F	##20
HRLY##	01.01.2006	31.12.9999	3	F	##30

   Save your data and return to the IMG.

3. The system should default three wage types only (##10, ##20, and ##30). You also should not be able to enter other wage types manually.

   a) *IMG: Personnel Management → Personnel Administration → Payroll Data → Basic Pay → Wage Types → Employee Subgroups for Primary Wage Type*

   b) The system displays the *Process feature LGMST*: Decision tree screen.

   c) Change the return value of the feature for your employee to 03/HRLY##.

   d) Activate the feature and then exit it. Call up the feature again to check that the data was really saved in the feature.

Continued on next page

4. To check the Basic Pay infotype again, you must create a new record once more (as of the hiring date of your employee 305992##). This involves overwriting the infotypes you have already created.

   a) *Human Resources → Personnel Management → Administration → HR Master Data*

   b) Choose *Maintain*.

   c) Enter the personnel number *305992##*.

   d) Enter infotype 0008 and use the start of this month as the start date.

   e) Choose *Create*. The wage types are now fixed defaults, and you are now unable to add any additional lines.

   f) Maintain the pay scale group and level.

   g) Choose *Enter*. The amounts are entered in the fields, and cannot be changed.

   h) Save your entries (overwrite the infotype record you have already created), and return to the SAP Easy Access menu.

Lesson Summary

You should now be able to:

- Set wage types as defaults for an employee with the help of the LGMST feature and a wage type model, depending on the enterprise and personnel structure

Unit Summary

You should now be able to:

- Explain the meaning of wage types in SAP
- Copy wage types and know what one must pay attention to when copying wage types
- Identify the control indicators that are used to determine to whom the wage type can be assigned, when it can be assigned, and how often.
- Specify the dialog characteristics of the wage types
- Know how wage types can be valuated indirectly by the system
- Set wage types as defaults for an employee with the help of the LGMST feature and a wage type model, depending on the enterprise and personnel structure

Unit 17

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Infotypes

Further information can be found in the Instructor Guide in SAPNet.

Unit Overview

In this unit, you learn about the general options for controlling infotypes. Then, the ways of modifying screen headers and screen modifications are explored. Finally, you learn about the option of accessing infotypes using the infotype menu.

Unit Objectives

After completing this unit, you will be able to:

- Describe what controls are available through infotype configuration
- Define fields relevant for retroactive accounting
- Explain what controls are available for the country infotype views
- Customize the user interface of the infotype under Screen Header
- Customize the user interface of the infotype under Screen Modification
- Create new infotype menus and process existing infotype menus
- Provide infotype menus as a tab page in the personnel master data maintenance of selected users

Unit Contents

Lesson: Infotype Attributes

470

Lesson Duration: 30 Minutes

Lesson Overview

Infotype Attributes

- Time constraint
- Fields relevant for retroactive accounting
- Country-specific infotypes

Lesson Objectives

After completing this lesson, you will be able to:

- Describe what controls are available through infotype configuration
- Define fields relevant for retroactive accounting
- Explain what controls are available for the country infotype views

Further information can be found in the Instructor Guide in SAPNet.

Business Example

You want to find out about the possibilites of configuring infotype attributes.

Entering Infotypes

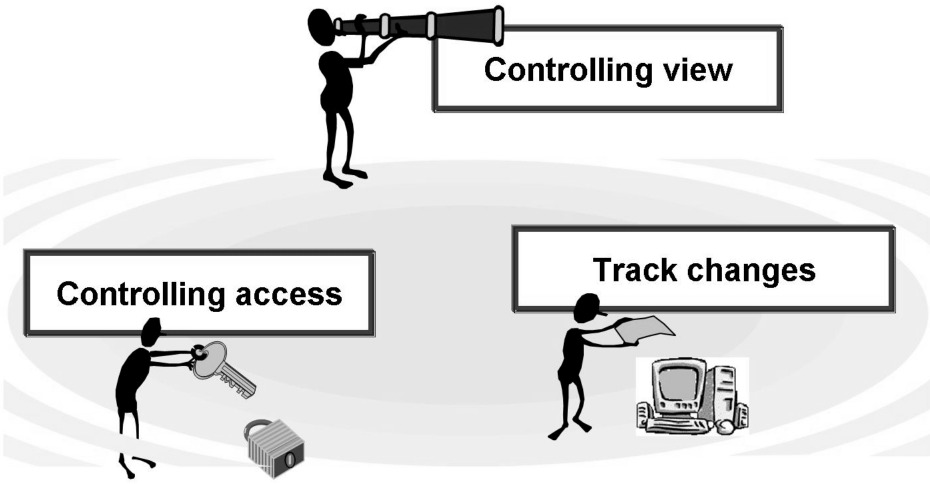

Figure 275: System Controls

There are different levels of user control.

- The first level of control of the **Controlling View** is what the user sees on the screen and menus, and what information is readily and easily available for the user to view. Additionally, there are controls for what information may be appropriate for data entry for certain employees, for example, country-specific infotypes.
- A second level of control is authorizations (**Controlling Access**) - what the user can access (see the HR940 course).
- And finally, the third level of control, **Track Changes**, involves tracking what changes are made (or what reports are run) (see appendix).

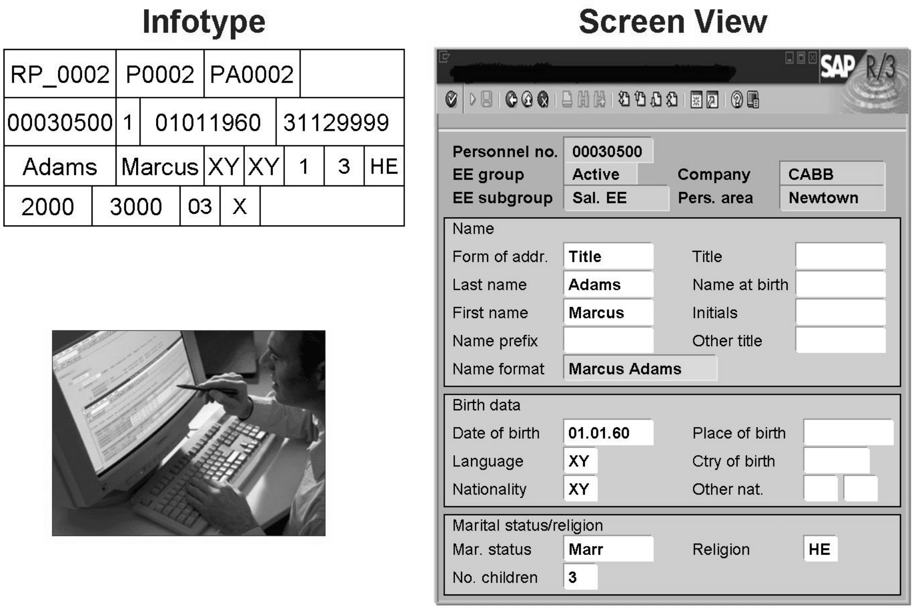

Figure 276: 1) Infotype Attributes

Infotype: A set of data grouped together into areas with similar content, for example, personal data, planned working time, organizational assignment, basic pay.

From a technical point of view, the structure of infotypes reflects a data grouping and can be identified by a four-digit key. Infotypes are also carriers of system control features, for example, time constraints, retroactive accounting relevance, and so on.

Screen view: The users see infotypes as input templates with which they can maintain the infotype records. A screen (or **DYN**amic **PRO**gram) consists of a screen and the accompanying flow logic. The main elements of a screen are:

- Attributes (for example, screen number, following screen)
- Layout (the arrangement of texts, fields, and other elements)
- Field attributes (definition of the properties of individual fields)
- Flow logic (calls the relevant ABAP modules)

In the mySAP ERP 2005 system, a specific screen may consist of data from one, two, or several infotypes.

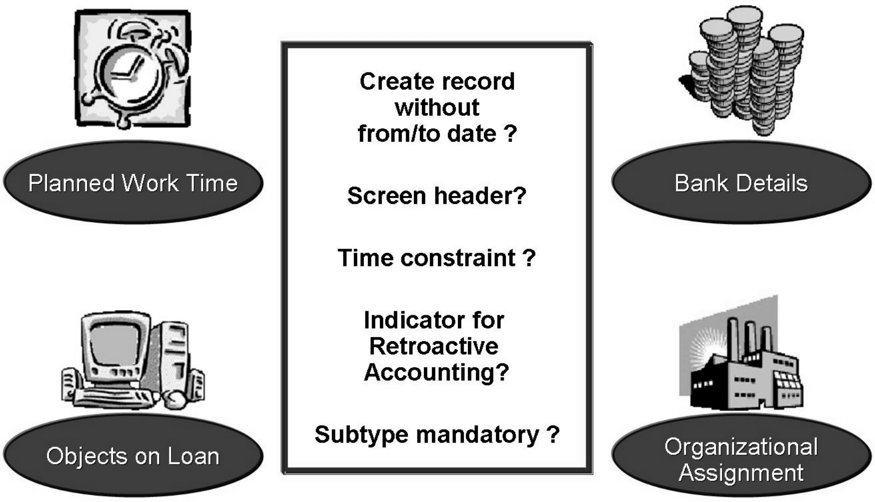

Figure 277: Configuring Infotypes

Data fields containing HR master data, time management data, and applicant data are grouped together for creating infotypes.

Infotypes are subject to the following naming conventions:

- Infotypes 0000 to 0999 for HR master data and certain applicant data
- Infotypes 1000 to 1999 for HCM planning data
- Infotypes 2000 to 2999 for time management data
- Infotypes 4000 to 4999 for applicant-only data
- Infotypes 9000 to 9999 are reserved for customers.

You can assign the system response for each individual infotype.

Information on dialog control, sort sequence, header layout, and so on can be specified for each infotype.

Infotype Control

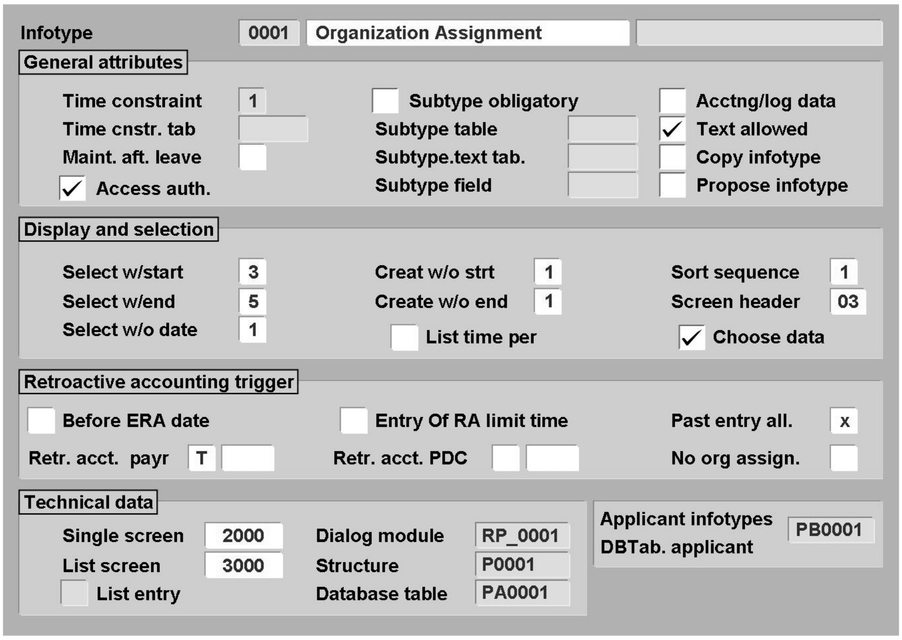

Figure 278: Infotype Control

The SAP standard system contains all infotypes and their default settings. This system is fully executable. If you adapt the system to meet your specific requirements, you must make a distinction between customer parts that you may customize and SAP parts that you may not change under any circumstances.

Fields Relevant for Retroactive Accounting

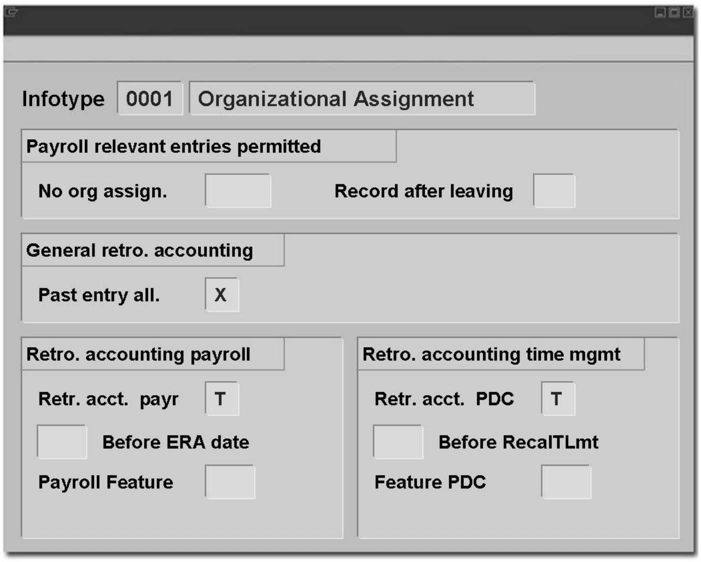

Figure 279: Defining Fields Relevant for Retroactive Accounting

You can define the retroactive accounting relevance of infotypes for Payroll and Time Management. Relevant infotypes are defined for retroactive accounting for payroll and time management in the customizing step *Define Fields Relevant for Retroactive Accounting* in the following ways:

- You can make the settings for Payroll and Time Management entirely independent of one another. If you set an infotype as relevant for field-dependent retroactive accounting, you must list the fields of the infotype in the *Field-Dependent Retroactive Accounting Recognition* view. An infotype can be defined in terms of a field as relevant for retroactive accounting with the *Field-Specific Retroactive Accounting Attributes*.

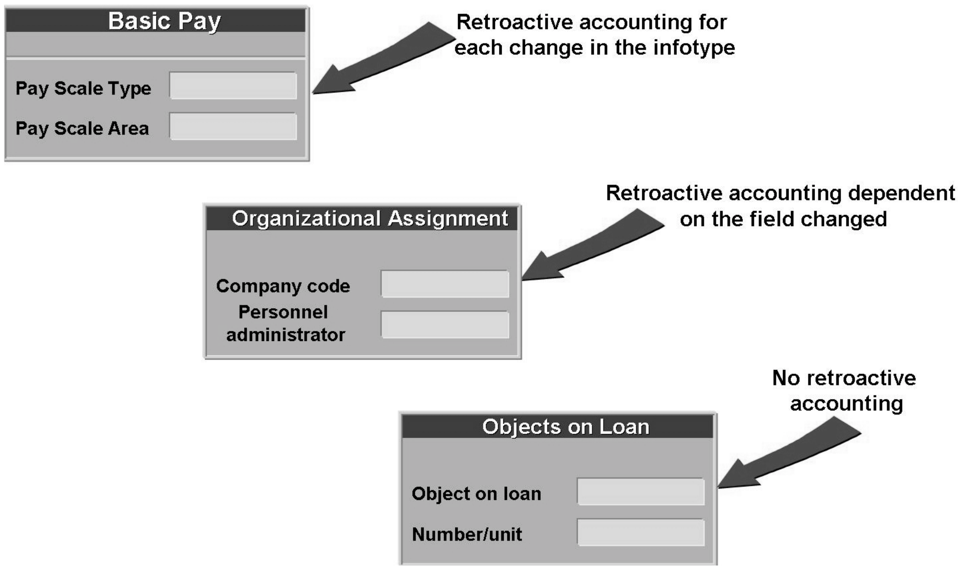

Figure 280: Retroactive Accounting Infotype and Field Triggers

You can indicate infotypes or infotype fields as being relevant for retroactive accounting. Fields (T) can be indicated as being relevant for retroactive accounting.

Fields relevant for retroactive accounting - if the relevance for retroactive accounting for the payroll field was set to *T* (field-dependent), you must list the fields which trigger the retroactive run for payroll in the *Field-Dependent Retroactive Accounting Recognition* view.

Enter the value 1 for these fields in the *Type* field. If the Retroactive accounting relevance for PDC time evaluation field is set to T (field-dependent), you must list the fields which trigger retroactive accounting of time data in the V_T588G view. Enter the value 2 for these fields in the *Type* field. You can choose the setting *Cannot be changed in the payroll past* for certain fields. Such a setting could, for example, be used for transfer data, since a retroactive change for such data would not make any sense.

Country-Specific Infotypes

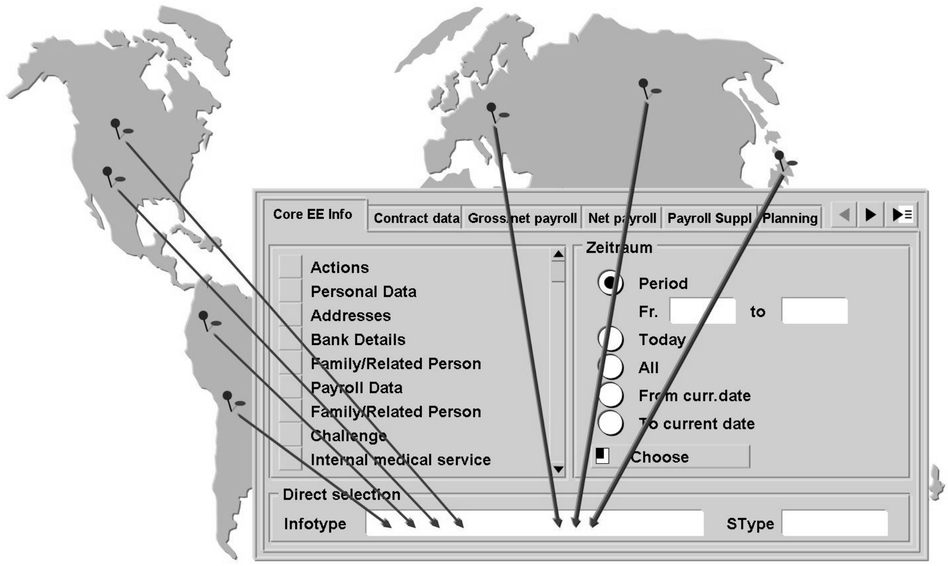

Figure 281: Country-Specific Infotypes and Subtypes

You can specify the permissibility of infotypes for countries. If the country-dependent subtypes indicator is set for the infotype, you can also specify the permissibility of subtypes for an infotype for countries.

Currently, this indicator can only be reported for infotypes whose subtypes are defined in the Info-subtype attributes view.

In the *Display Personnel Master Data* (PA20) and *Maintain Personnel Master Data* (PA30) transactions, the infotypes with a country grouping of personnel numbers are checked. This means that only the infotypes and subtypes which are approved for the country groupings are displayed in the *Infotypes - Country-Specific Settings* view.

Example:
The infotype 0224 stands for the *Canadian Taxation* infotype and is distinguished as being exclusively valid for Canada in the configuration. If an existing personnel number is entered in the personnel number field in the *Maintain Master Data* view, the system determines whether the employee belongs to a Canadian company code (based on record IT0001). If the employee does not belong to a Canadian Company code, infotype 0224 cannot be maintained and will not be visible in the pull-down selection for infotypes.

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Exercise 26: Infotype Attributes

Exercise Duration: 10 Minutes

Exercise Objectives

After completing this exercise, you will be able to:

- Describe what controls are available through infotype configuration.
- Define fields relevant for retroactive accounting.

Business Example

You want to familiarize yourself with infotype attributes.

Task 1:

Use the infotype assigned to your group:

Group	Infotype Assignment	Group	Infotype Assignment
00	0007	16	0050
01	0009	17	0031
02	0105	18	0004
03	0022	19	2050
04	0015	20	2051
05	0027	21	2001
06	0002	22	2002
07	0014	23	2003
08	0008	24	2004
09	0017	25	2005
10	0019	26	2006
11	0040	27	2007
12	0041	28	2010
13	0077	29	2012
14	0001	30	2013
15	0016		

Continued on next page

Use the infotype assigned to your group on the data sheet to find information regarding the fields used to configure infotype characteristics. Note that answers are dependent on your infotype and specific answers can be achieved using F1 Help.

Answer the following questions about your infotype's attributes:

1. What time constraint does your infotype have?

2. What are the default start and end dates when this infotype record is created?

3. Is this infotype also used for applicants? Yes / No?

Task 2:

Do the following exercises:

Answer these Retroactive Accounting questions regarding your infotype.

1. Is Retroactive Payroll Accounting triggered by changes to this infotype? Yes / No?

Continued on next page

2. Is Retroactive Time Accounting triggered by changes to this infotype? Yes / No?

Solution 26: Infotype Attributes

Task 1:

Use the infotype assigned to your group:

Group	Infotype Assignment	Group	Infotype Assignment
00	0007	16	0050
01	0009	17	0031
02	0105	18	0004
03	0022	19	2050
04	0015	20	2051
05	0027	21	2001
06	0002	22	2002
07	0014	23	2003
08	0008	24	2004
09	0017	25	2005
10	0019	26	2006
11	0040	27	2007
12	0041	28	2010
13	0077	29	2012
14	0001	30	2013
15	0016		

Use the infotype assigned to your group on the data sheet to find information regarding the fields used to configure infotype characteristics. Note that answers are dependent on your infotype and specific answers can be achieved using F1 Help.

Answer the following questions about your infotype's attributes:

1. What time constraint does your infotype have?

   Answer: IMG: *Personnel Management → Personnel Administration → Customizing Procedures → Infotypes → Infotypes*

   In the Choose Activity screen, select the *Infotype* option. Select the infotype assigned to your group by double clicking it or highlighting the infotype and selecting the *Details* icon.

Continued on next page

Field: Time Constraint

Meaning of values:

1:

An infotype record must be available at all times. This record may have no time gaps. You may not delete the record last stored on the database because all records of this infotype would otherwise be deleted.

2:

Only one record may be available at one time, but time gaps are permitted.

3:

Any number of records may be valid at one time, and time gaps are permitted.

A

Only one record may ever exist for this infotype. It is valid from January 1, 1800 to December 31, 9999. Splitting is not permitted. Infotypes with the time constraint **A** may not be deleted.

B

Only one record may ever exist for this infotype. It is valid from January 1, 1800 to December 31, 9999. Splitting is not permitted. Infotypes with the time constraint **B** may be deleted.

T:

The time constraint varies depending on the subtype (see Table 591A).

Go to table maintenance (transaction SM30) and enter the table V_T591A. Alternatively, you can choose transaction PM01 (Copy infotype) to call the 591A table. In this case, enter the infotype number, then follow the menu path *Goto → Subtype characteristics.*

Z:

Refers to time management infotypes. The time constraint for these infotypes depends on the time constraint class defined in view V_T554S_I .

2. What are the default start and end dates when this infotype record is created?

   Answer:

   See field: *Create w/o strt*

   See field: *Create w/o end*

3. Is this infotype also used for applicants? Yes / No?

   Answer: See field: *Applicant DBTab*

   There is a value in this field if the infotype is used in Recruitment.

Continued on next page

Task 2:

Do the following exercises:

Answer these Retroactive Accounting questions regarding your infotype.

1. Is Retroactive Payroll Accounting triggered by changes to this infotype? Yes / No?

   Answer: IMG: *Personnel Management → Personnel Administration → Customizing Procedures → Infotypes → Infotypes*

   In the *Choose Activity* screen, select the *Infotype* option. Select the infotype assigned to your group by double clicking it or highlighting the infotype and selecting the *Details* icon.

   See field: *Retr. acct. payr.* has the value *blank, R* or *T*.

2. Is Retroactive Time Accounting triggered by changes to this infotype? Yes / No?

   Answer: See field: *Retr. acct. PDC* has the value *blank, R* or *T*.

Lesson Summary

You should now be able to:

- Describe what controls are available through infotype configuration
- Define fields relevant for retroactive accounting
- Explain what controls are available for the country infotype views

Lesson: Customizing the User Interfaces

484

Lesson Duration: 30 Minutes

Lesson Overview

Customizing the user interfaces of infotypes

- Infotype screen headers
- Screen modification

Lesson Objectives

After completing this lesson, you will be able to:

- Customize the user interface of the infotype under Screen Header
- Customize the user interface of the infotype under Screen Modification

Further information can be found in the Instructor Guide in SAPNet.

Business Example

You should create a new screen header for an infotype in your company.

You should then become acquainted with the subject of screen modification.

Screen Headers

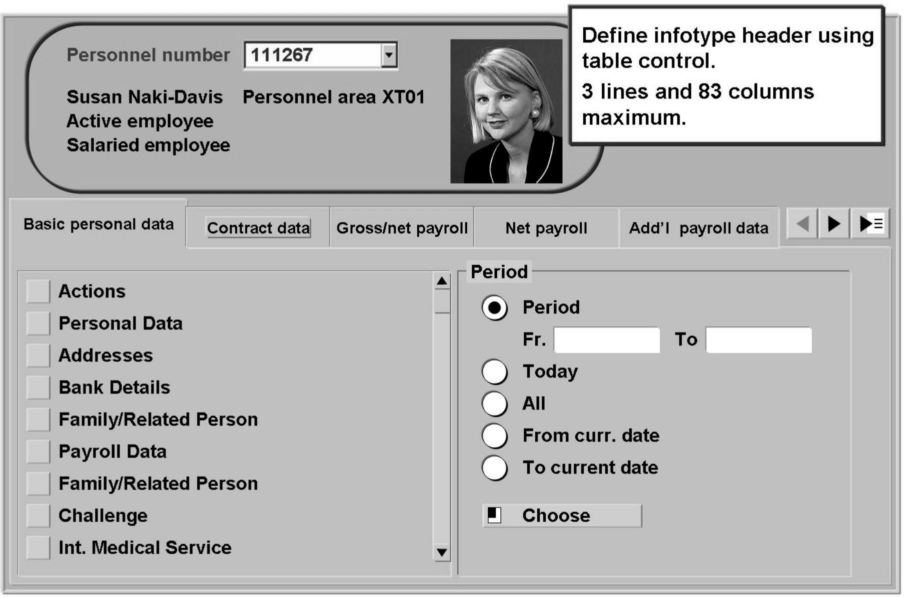

Figure 282: 2) Customizing User Interfaces: Screen Headers

The screen header consists of the first three lines displayed on single and list screens.

In the standard ERP system, a screen header is already assigned to each infotype. The system also contains information about whether the data about the system date or the start date of the *Organizational Assignment* infotype is valid. Each screen header is assigned a modifier which depends on the transaction class (A = Personnel Administration, B = Recruitment).

You can change the screen header, that is, you can customize the first three lines. Up to and including Release 4.0, you can display data from the following infotypes: *Organizational Assignment* (0001), *Personal Data* (0002), *Planned Working Time* (0007), and *Basic Pay* (0008). As of Release 4.5, you can display data from any infotype, including customer infotypes.

Passport Photos – In addition to any infotype fields you can also include passport photos of your employees in the *Infotype Header Definition* view. Determine the document type in the system table (T77S0) with which you want to create passport photographs in the visual archive.

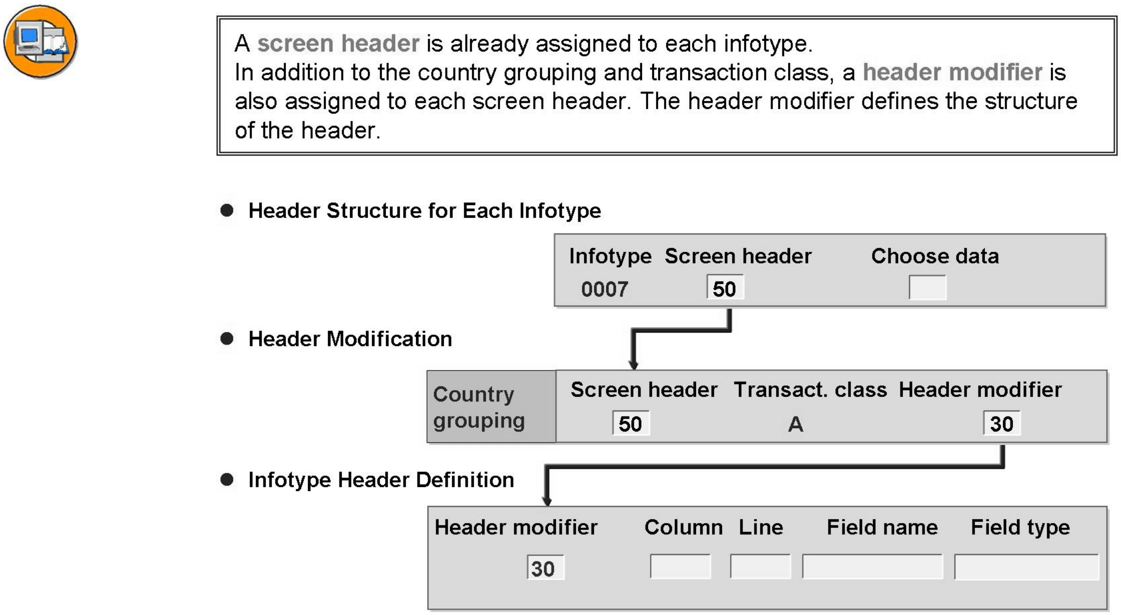

Figure 283: Customizing the User Interface: Defining Headers

In the *Header Structure for Each Infotype* view, a header is already assigned to each infotype. With the *Choose Data* indicator, you define the selection time for the selection of data from the different infotypes used in the creation of the infotype header. If you set the *Choose Data* indicator, the valid data on the start date of the infotype record that is currently being processed or displayed is used to create the infotype headers. If you do not set the *Choose Data* indicator, the data valid for the system date is used for creating the infotype headers.

Depending on the transaction class ("A" = Personnel Administration, "B" = Recruitment) and the country grouping, a header modifier is assigned to this infotype header in the *Header Modification* view (V_T588I).

In the *Infotype Header Definition* view, specify the name and positions for the field contents to be displayed in the header. The field type controls how the fields are formatted when used in the infotype headers.

Save the table entries. The */1PAPAXX/HDR_mmmnnc* reports are now generated, where 'mmm' is the client, 'nn' is the header modifier, and "c"is the transaction class.

Screen Modifier

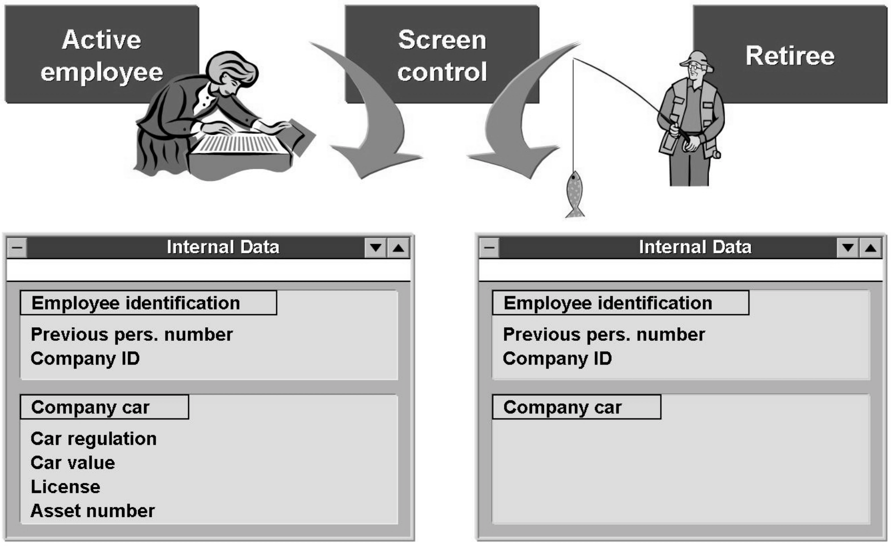

Figure 284: Customizing the User Interface: Screen View

Different entry screens are delivered for some infotypes. These alternative screens are already predefined by SAP using the transaction class and country grouping. A different screen can be used for different transaction classes ("A" for employee, "B" for applicant) or country groupings. You can also modify the attributes of the individual fields within a screen. For example, you can define fields as mandatory fields or hide all unnecessary fields. You may want to suppress field attributes in accordance with certain employee control data.

The screen modification procedure is the same for both employees and applicants.

In order to define the screen view, you need to know the name of the infotype module pool and the screen number. To display this information, call up the infotype maintenance transaction and choose *System* → *Status*.

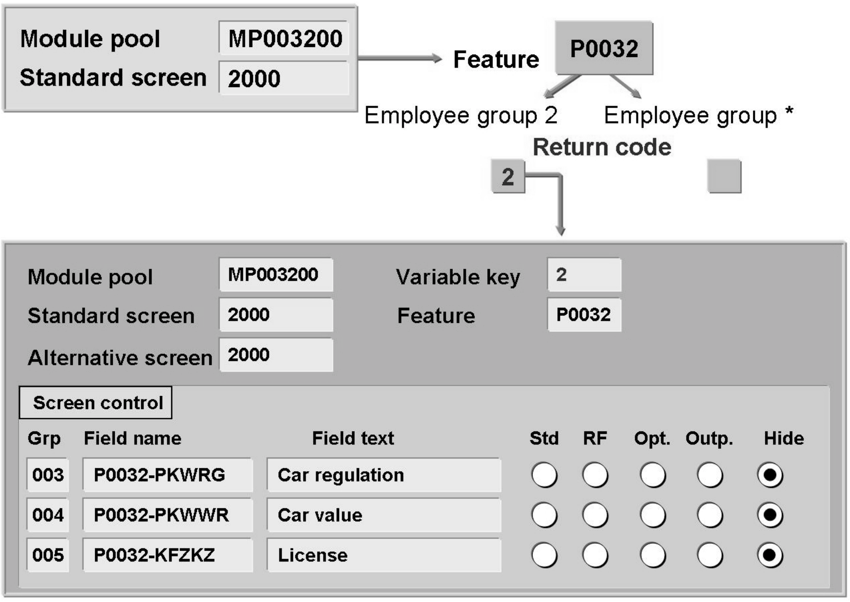

Figure 285: Customizing the User Interface: Screen Modification

You can change the attributes of the individual screen fields in the *Change Screen Modifications* step.

Find the entry for the current screen. On the detail screen, specify which fields should be modified. Among the field attributes that can be specified are: standard, required, optional, cannot be maintained and hidden.

If you need a modified screen but cannot find an entry in this view, create a new entry for the screen, making sure that the *Variable key* field is empty.

If the screen modifications for the infotypes should be generally applicable, you do not require a feature or any additional entries in this view.

As in this example, the screen modification can be based on the organizational assignment for the employee. The modification is determined by feature "Pnnnn" (nnnn = infotype number). If you do not enter a return value for the feature in the decision tree, the entry whereby the Variable key field remains empty is automatically valid - in other words, the basic entry (basic screen). If no feature is available for the infotype in question, you must create it.

Make a new entry with the return value in the variable key for each return value of the feature. Assign the number of an alternative screen, if applicable. The screen modification in the detail screen now applies to the alternative screen.

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Exercise 27: Customizing User Interfaces – Screen Headers

Exercise Duration: 20 Minutes

Exercise Objectives

After completing this exercise, you will be able to:

- define an infotype header

Business Example

Your company wants a specific header on your infotype. This header should have the following information: Personnel Number, Employee Name, Personnel Area, Employee Group and Employee Subgroup.

Task 1:

Create a new header for your infotype (see table).

Hint: Before you start the exercise, create a record for your employee 540991##, Winnie Chung, for your infotype.

Easy Access Menu: *Human Resources → Personnel Management → Administration → HR Master Data → Maintain.*

In the *Personnel number* field, enter employee number 540991## (Winnie Chung), and in the *Infotype* field, enter your infotype number. Choose *Create*. Depending on the infotype you are editing, you may also have to select a subtype.

Note the sequence of fields in the header.

Choose *Cancel* (you do not have to save the infotype).

1. Assign your infotype a new screen header. Assign the number ## +50 to your screen header (so group 01 will be 51 and group 12 will be 62). Use the data valid at the start date of the infotype to build the header.
2. Define a new header modifier ##+*30* for your screen header ##+50. This header modifier should only apply to employees, that is, to transaction class A.
3. Create a definition for your header with the following structure:

Continued on next page

	Descrip-tion	Field contents	Field Text	Descrip-tion	Field con-tents	Field Text
Line 1	Name	Winnie Chung				
Line 2	Employee group	1	Active	Personnel area	CABB	CAB Com-pany
Line 3	Personnel number	540991##				

All fields of the *Organizational Assignment infotype* (0001) should be read. Use the DD1 or DD2 field type for the name (in other words, the short field text or middle field text for the field), the DAT field type for the field contents, and finally the DTX field type for the field content text.

Copy these values from the header modification 00, since this modification has similar fields, which you can add to if necessary.

You can save these entries, but do **not generate**.

4. Try to create a new infotype for your employee 540991## for today (you do not have to save the infotype) and note the changed header.

Task 2:

Do the following task: **(optional)**

1. How would you hide a field of your choice in the screen area for all employees?

Hint: For this, you must first determine the program (screen) and the screen number of your infotype.

Then, you must make the changes in Customizing. Do not actually make these changes.

Solution 27: Customizing User Interfaces – Screen Headers

Task 1:

Create a new header for your infotype (see table).

Hint: Before you start the exercise, create a record for your employee 540991##, Winnie Chung, for your infotype.

Easy Access Menu: *Human Resources → Personnel Management → Administration → HR Master Data → Maintain.*

In the *Personnel number* field, enter employee number 540991## (Winnie Chung), and in the *Infotype* field, enter your infotype number. Choose *Create*. Depending on the infotype you are editing, you may also have to select a subtype.

Note the sequence of fields in the header.

Choose *Cancel* (you do not have to save the infotype).

1. Assign your infotype a new screen header. Assign the number ## +50 to your screen header (so group 01 will be 51 and group 12 will be 62). Use the data valid at the start date of the infotype to build the header.
   a) IMG: *Personnel Management → Personnel Administration → Customizing User Interfaces → Change Screen Headers*
   b) Choose *Header Structure for Each Infotype*.
   c) In the line for your infotype, enter the value ##+50 in the *Screen header* field. Check that the *Choose data* indicator is set. This ensures that the values valid on the start date of the infotype record are displayed in the header.
   d) Choose Back to return to the list of infotype header activities.

Continued on next page

2. Define a new header modifier ##+*30* for your screen header ##+50. This header modifier should only apply to employees, that is, to transaction class A.

   a) In the *Choose Activity* dialog box, select Header modification.

   b) Select *New entries*.

   c) Enter the following values:

Screen Header	Transaction Class	Header Modification
##+50	A	## + 30

   d)

Hint: You can use different header modifiers for each screen header for applicants and employees.

Save the values and return to the list of infotype header activities.

3. Create a definition for your header with the following structure:

	Description	Field contents	Field Text	Description	Field contents	Field Text
Line 1	Name	Winnie Chung				
Line 2	Employee group	1	Active	Personnel area	CABB	CAB Company
Line 3	Personnel number	540991##				

All fields of the *Organizational Assignment infotype* (0001) should be read. Use the DD1 or DD2 field type for the name (in other words, the short field text or middle field text for the field), the DAT field type for the field contents, and finally the DTX field type for the field content text.

Copy these values from the header modification 00, since this modification has similar fields, which you can add to if necessary.

Continued on next page

You can save these entries, but do **not generate**.

a) Choose Infotype Header Definition.

b) The aim is for the following entries to be displayed:

Header modification	Line	Column	IT	Type	Field Name	Field type
## + 30	1	01	0001		ENAME	DD1
## + 30	1	14	0001		ENAME	DAT
## + 30	2	01	0001		PERSG	DD2
## + 30	2	14	0001		PERSG	DAT
## + 30	2	17	0001		PERSG	DTX
## + 30	2	33	0001		WERKS	DD1
## + 30	2	46	0001		WERKS	DAT
## + 30	2	51	0001		WERKS	DTX
## + 30	3	01	0001		PERNR	DD2
## + 30	3	14	0001		PERNR	DAT

c) With the cursor, select suitable lines in the table for the header modification 00.

d) Choose *Copy*.

e) In the *Header modification* field in each line to be copied, enter your header modification value ## +30 (where ## is your group number). Choose *Enter* and *Save*.

f) If necessary, select *New Entries* to add missing lines.

g) Save the entries you have made.

Caution: Do not generate any headers yourself. You may destroy or damage the data of other course participants.

Continued on next page

4. Try to create a new infotype for your employee 540991## for today (you do not have to save the infotype) and note the changed header.

   a) Create a record of your infotype for your employee 540991##, Winnie Chung.

   b) SAP Easy Access Menu: *Human Resources→ Personnel Management → Administration → HR Master Data → Maintain.*

   c) In the *Personnel number* field, enter employee number 540991## (Winnie Chung), and in the *Infotype* field, enter your infotype number.

   d) Choose *Create*. If necessary, specify a subtype (of your choice).

   e) Your infotype should have your new header. Choose *Cancel* (you do not have to save the infotype).

Task 2:

Do the following task: **(optional)**

1. How would you hide a field of your choice in the screen area for all employees?

   Hint: For this, you must first determine the program (screen) and the screen number of your infotype.

   Then, you must make the changes in Customizing. Do not actually make these changes.

   a) In the *Personnel number* field, enter employee number 540991## (Winnie Chung), and in the *Infotype* field, enter your infotype number.

   b) Choose *Create*. If necessary, specify a subtype (of your choice).

   c) In the *System* menu, choose *Status*.

   d) Make a note of the entries you find in the *Program (Screen)* and *Screen number* fields.

   e) To hide/show fields, navigate to the following IMG activity:

   f) IMG: *Personnel Management → Personnel Administration → Customizing User Interfaces → Change Screen Modification*

   g) Choose *Position* and enter the values you noted earlier in the *Module pool* and *Standard screen* fields.

   h) When the value is found, choose *Details*.

   i) As a deviation from the SAP standard, you can select *Show/Hide*.

   j) Do not actually make these changes; exit the input screen without saving.

Lesson Summary

You should now be able to:

- Customize the user interface of the infotype under Screen Header
- Customize the user interface of the infotype under Screen Modification

Lesson: Infotype Menus

496

Lesson Duration: 40 Minutes

Lesson Overview

- Creating individual infotype menus with selected infotypes
- Including infotype menus in personnel master data maintenance

Lesson Objectives

After completing this lesson, you will be able to:

- Create new infotype menus and process existing infotype menus
- Provide infotype menus as a tab page in the personnel master data maintenance of selected users

Further information can be found in the Instructor Guide in SAPNet.

Business Example

You should create a new infotype menu for your employee, in which infotypes that were specified beforehand are offered for maintenance.

Infotype Menus

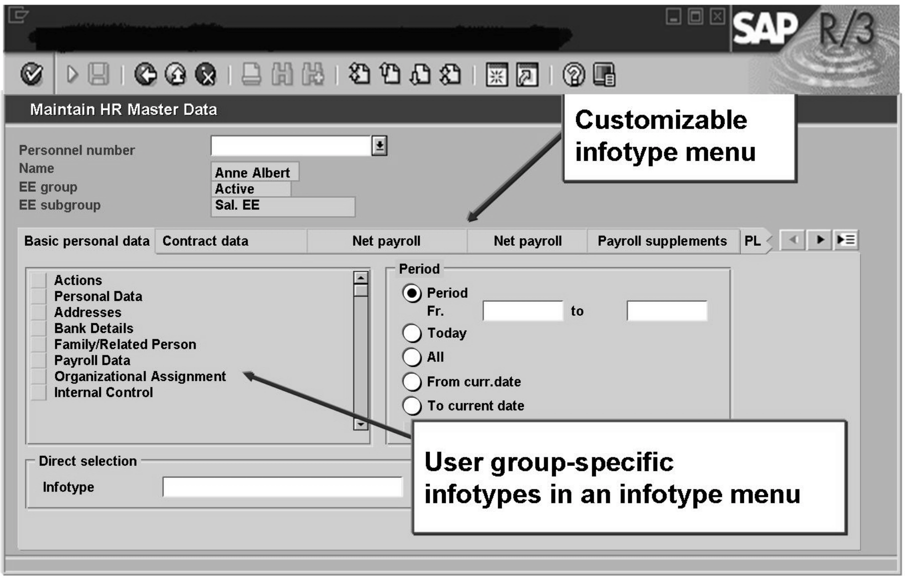

Figure 286: 3) Infotype Menus

Infotype Menus: You can select the required infotype for a certain personnel number from an infotype list and process it. You can change the menu sequence as follows:

- Defining user group-specific menus
- Changing the menu structure
- Inserting new menu options

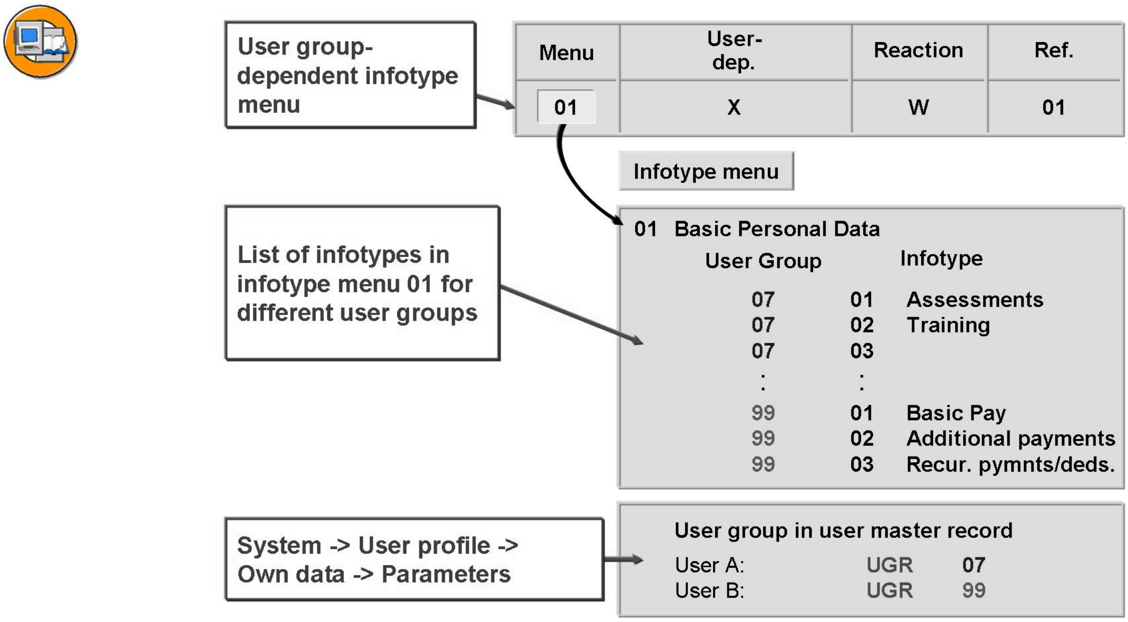

Figure 287: Changing Infotype Menus

The *Infotype Menu* customizing step guides you through the steps necessary to configure the information shown on each of the menu tabs.

The activities involved in configuring the choices on a menu tab include:

- Defining whether the menu is to be dependent on the user group
- If necessary, assigning the system response for the case where the user has not maintained the user group or where there are no entries in the menu
- Assigning a reference user group that can be used to set up the menu, if necessary

Infotypes in the Infotype Menu

- Select the menu category “I” and the infotype menu.
- Copy the infotypes into the menu for the user group.

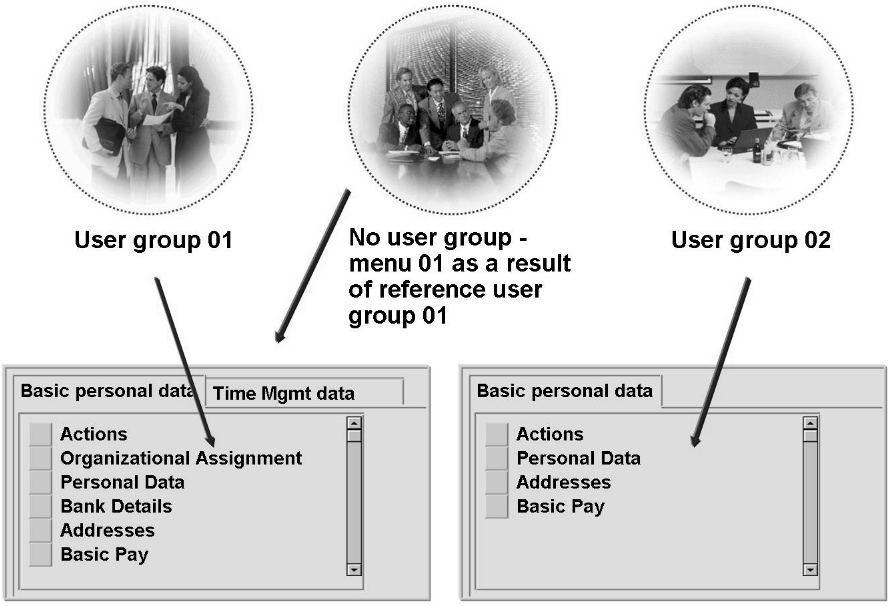

Figure 288: User Groups and Reference User Groups

You can use the menu control function to store different menus and personnel actions for different user groups (user parameter UGR). This means that you can adapt the system so that it meets the requirements of the individual users.

If your menu is distinguished as user group dependent, enter a reference user group as well, with which the menu is to be created if an administrator has not maintained the user group in his or her user master data. On this screen, you also specify the infotype sequence for the different user groups.

If you do not define your menu as user group dependent, you can only maintain the infotype sequence for the user group 00. This is valid for all users that select this menu.

Hierarchy When Building Infotype Menus

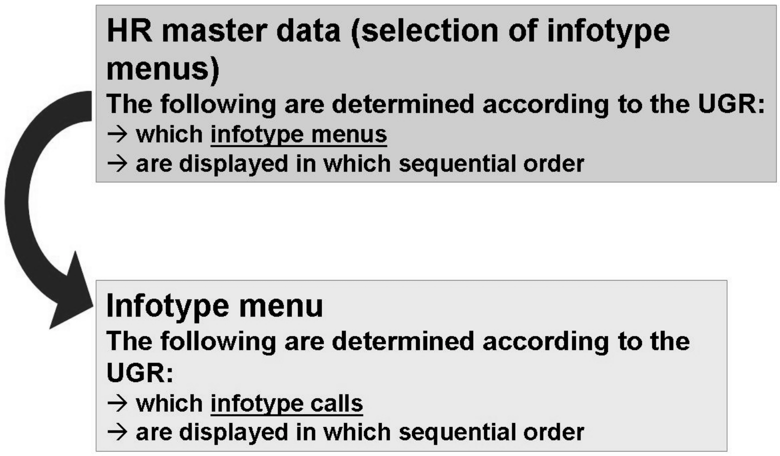

Figure 289: Hierarchy When Building Infotype Menus

- Up to this point, the infotype menu area has been described. In addition, you must also determine which infotype menus are displayed in the HR master data maintenance and display transaction.
- HR master data is processed in this step. You can determine - according to the various user groups - which infotype menus are displayed and the sequential order in which they are displayed. The relevant IMG activity is "Determine choice of infotype menus".

HR Master Data

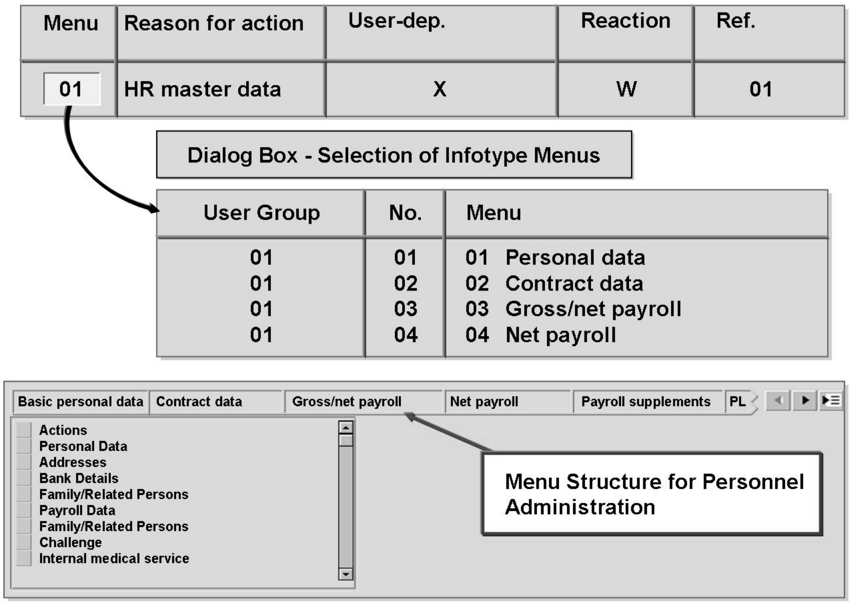

Figure 290: Defining the Selection of Infotype Menus

Here you define the structure of the menu that appears when the HR master data is maintained and displayed. This selection can also be defined using the user groups (user parameter “UGR”).

If no entry exists in the table for the user's user group, or if the user has not maintained his or her user group, the menu structure is determined using the reference user group.

User group dependence for infotype menu selection:

1. Select the menu type “S” and “01 HR master data” menu for infotype menu selection.
2. Determine the user group dependence and the system response if the user has not maintained the user group or there are no entries in the menu.
3. Assign a reference user group with which the menu can be created.

Infotype menus for infotype menu selection:

1. Choose the menu type “S” and “01 HR master data” menu for infotype menu selection.
2. Extend the “01 HR master data” selection menu by accepting the newly created infotype menus for the respective user group.

Menus for Fast Entry

Figure 291: Menus for Fast Entry

For fast entry menus, you can assign an entry screen, a default value screen and a selection report to a fast entry menu option.

Prerequisites

- If you want to change the infotype text, select the “Infotypes” customizing step, then the “Further Infotype Texts” activity, and enter a screen type for each infotype. This text can be accessed in the infotype menus.
- Set up the infotype menus for fast entry in the “Infotype Menu” step. The following infotype menus are predefined as standard settings for fast entry:
  - 07 Master Data Fast Entry (Dependent on the user group)
  - 09 Time Data Fast Entry (Dependent on the user group)
- Enter the corresponding screen type for your infotype (screen control field), so that the corresponding text is used.

In the “Set Up Infotype Menu for Fast Data Entry” step, you find the following activities:

- Activities - Selection reports for fast entry. If you use your own reports for personnel number selection in fast entry, you must ensure that these reports are allowed for all infotypes.
- Screen types for fast entry: For each infotype and screen type (screen control) you must define the screen number for creating records with default values, the screen number for fast entry of several personnel numbers, and the reports for personnel number selection.

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Exercise 28: Infotype Menus

Exercise Duration: 20 Minutes

Exercise Objectives

After completing this exercise, you will be able to:

- Create customer-specific infotype menus that are dependent on user groups.
- Include your own infotype menu in the menu selection.

Business Example

The personnel administrators need their own infotype menu for the following infotypes that are not included in the standard menu:

- 0028 Internal Medical Service
- 0057 Membership Fees
- 0082 Additional Absence Data

This infotype menu should be available ONLY to users in your user group ##+50 in addition to several infotype menus that have already been set up.

Task 1:

Do the following exercises:

1. Create a new menu with the number ##+50 (## = group number) and the name *My Menu Gr.##*.
2. The menu should be dependent on the user group. The reference user group should be 01.
3. Include the infotypes listed above in the required sequence in your menu for the user group ##+50 (## = group number). Only infotype 0028 should be displayed for reference user group 01.

Task 2:

Do the following exercises:

1. Modify the HR master data. User group 50 + ## should be able to see all infotype menus that are displayed in user group 01. User group 50 + ## should also contain infotype menu 50 + ##.

Continued on next page

Task 3:

Do the following exercises:

1. To ensure that your newly set up infotype menu appears only for users in your user group, check that the UGR user parameter is set to ##+50 in your user profile.

Task 4:

Do the following exercises:

1. Go to Personnel Administration and check to see whether your infotype menu appears in the Other Menu selection.

Solution 28: Infotype Menus

Task 1:

Do the following exercises:

1. Create a new menu with the number ##+50 (## = group number) and the name *My Menu Gr.##*.
   a) *IMG: Personnel Management → Personnel Administration → Customizing Procedures → Infotype Menus → Infotype Menu*
2. The menu should be dependent on the user group. The reference user group should be 01.
   a) In the *Choose Activity* dialog box, select the *User group dependency on infotype menus* option.
   b) Choose *New entries* and enter the following information in the table:

Menu	Field Text	User Group Dep.	Reaction	Ref
##+50	My Menu Group ##	✓		01

   c) Choose *Save* and go back to the *Choose Activity* dialog box.

Continued on next page

3. Include the infotypes listed above in the required sequence in your menu for the user group ##+50 (## = group number). Only infotype 0028 should be displayed for reference user group 01.

   a) In the *Choose Activity* dialog box, select the *Infotype menu* option and then select *Choose*.

   b) In the *Determine Work Area: Entry* dialog box, enter your menu number (##+50) and choose *Continue*.

   c) Choose *New entries* and enter the following information in the table:

User Group	**No.**	**Infotype**	**Screen Control**	**Infotype Text**
##+50	*01*	*0028*		
##+50	*02*	*0057*		
##+50	*03*	*0082*		
01	*01*	*0028*		

   d) Save (confirm the information message with Enter) and return to the IMG.

Continued on next page

Task 2:

Do the following exercises:

1. Modify the HR master data. User group 50 + ## should be able to see all infotype menus that are displayed in user group 01. User group 50 + ## should also contain infotype menu 50 + ##.

   a) *IMG: Personnel Management → Personnel Administration → Customizing Procedures → Infotype Menus → Determine choice of infotype menus → Infotype menus*

   b) In the dialog box, enter “01” as the menu (for HR master data), since the menu should be available in master data, and choose *Continue*.

   c) Select the entries for user group *01* and choose *Copy as....*

   d) Change the user group for the copied rows of data from *01* to *## +50* and then choose *Enter*. A table should appear that is similar to the table shown below:

User Group	No.	Menu	Field Text
## + 50	01	01	Basic personal data
## + 50	02	02	Contractdata
## + 50	03	03	Gross/Net payroll
## + 50	04	04	Net payroll
## + 50	05	05	Payroll supplements
## + 50	06	06	Planning data
## + 50	07	ZZ	Time Mgmt. trans. data

   e) Choose *New entries* and enter the following information in the table:

User Group	No.	Menu	Field Text
## + 50	10	## + 50	My Menu Group ##

   f) Save and return to *Structure Display* in the IMG.

Continued on next page

Task 3:

Do the following exercises:

1. To ensure that your newly set up infotype menu appears only for users in your user group, check that the UGR user parameter is set to ##+50 in your user profile.

   a) *Easy Access Menu: System →User Profile → Own Data.*

   b) Select the *Parameters* tab page.

      Set the UGR user parameter to ##+50:

Parameters	**Value**	**Field Text**
UGR	##+50	User Group (HR Master Data)

   c) Save your entries.

Task 4:

Do the following exercises:

1. Go to Personnel Administration and check to see whether your infotype menu appears in the Other Menu selection.

   a) To check your changes, choose the following path in the SAP Easy Access menu:

   b) *Human Resources→ Personnel Management → Administration → HR Master Data → Maintain.*

   c) Use the scrollbar to locate your new menu (## +50).

      Hint: Your new menu should contain the following infotypes:

      0028 Internal Medical Service

      0057 Membership Fees

      0082 Additional Absence Data

Lesson Summary

You should now be able to:

- Create new infotype menus and process existing infotype menus
- Provide infotype menus as a tab page in the personnel master data maintenance of selected users

Unit Summary

You should now be able to:

- Describe what controls are available through infotype configuration
- Define fields relevant for retroactive accounting
- Explain what controls are available for the country infotype views
- Customize the user interface of the infotype under Screen Header
- Customize the user interface of the infotype under Screen Modification
- Create new infotype menus and process existing infotype menus
- Provide infotype menus as a tab page in the personnel master data maintenance of selected users

Unit 18

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Personnel Actions

Further information can be found in the Instructor Guide in SAPNet.

Unit Overview

In this unit, you learn how a personnel action is created using an example. The meaning of the Additional Actions infotype is also discussed and some actions are carried out as examples.

Unit Objectives

After completing this unit, you will be able to:

- Configure personnel actions
- Give examples of personnel actions

Unit Contents

Lesson: Personnel Actions

512

Lesson Duration: 70 Minutes

Lesson Overview

- Configuration of actions
- Examples of personnel actions

Lesson Objectives

After completing this lesson, you will be able to:

- Configure personnel actions
- Give examples of personnel actions

Further information can be found in the Instructor Guide in SAPNet.

Business Example

In your company, your employees receive a payment of EUR 200 when they have a child. You want to set up a personnel action containing the relevant infotypes for this.

General Information about Personnel Actions

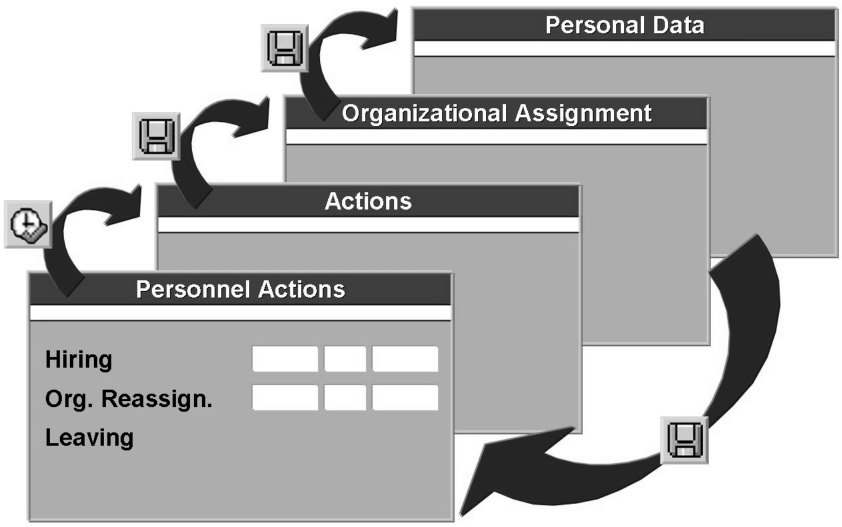


Figure 292: Overview: Personnel Actions

Actions facilitate the processing of complex personnel processes. The system displays all relevant infotypes in a sequence that has already been defined, so that you can maintain the necessary data.

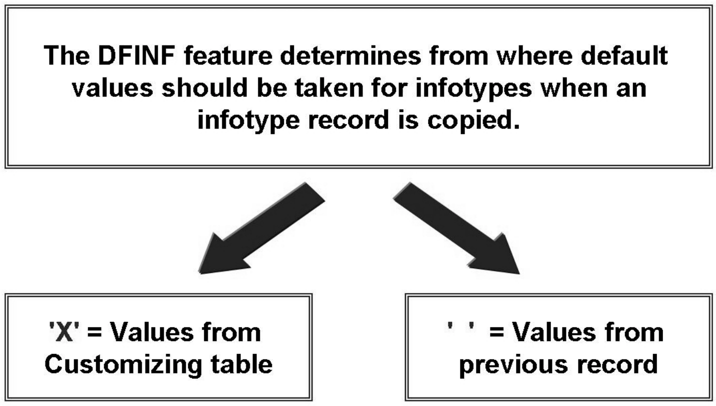


Figure 293: Default Values for Infotypes (DFINF)

This feature controls the determination of field values when you copy a record. Default values are usually copied from the previous record. However, in some cases, values should be redetermined using the Customizing settings. For example, this is possible for the following infotypes:

- Organizational Assignment (0001) - Default value for payroll area
- Planned Working Time (0007) - Default value for work schedule rule (SCHKZ)
- Basic Pay (0008) - Default values for pay scale type and area; also default values for capacity utilization level and working hours per period from infotype 0007

Setting up a New Personnel Action

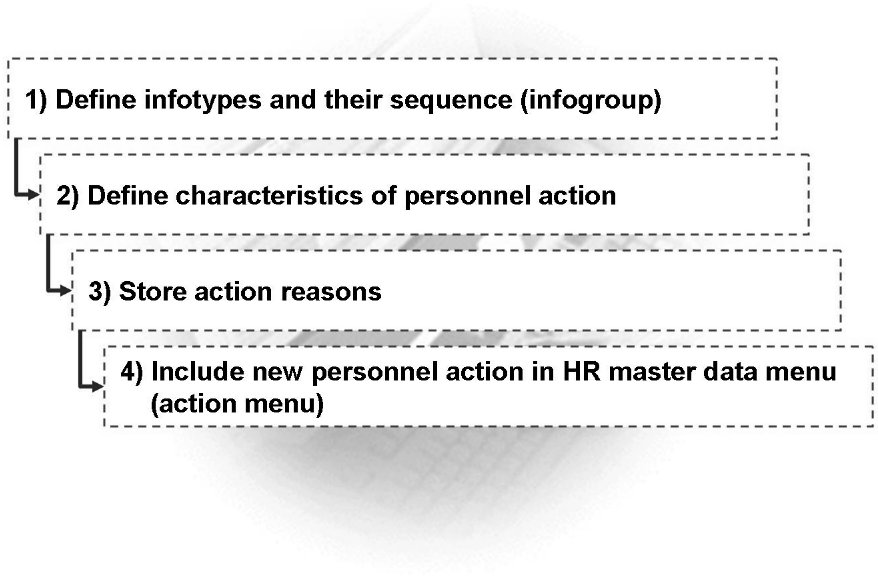


Figure 294: Setting up a New Personnel Action

Through configuration, you can:

- Change the sequence of the infotypes in existing actions
- Create new actions

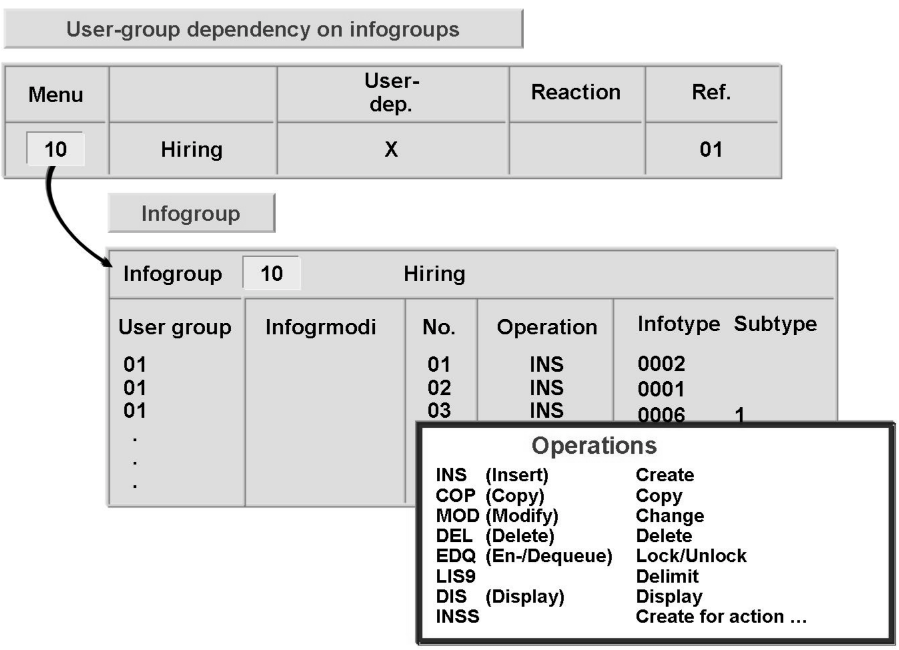


Figure 295: 1) Determining Infogroups

User-group dependency on infogroups: In this step, you define the infogroups processed when actions are executed. This is preparation for the next activity. You must determine the worklist for each personnel action that is to be completed, namely the **infogroup**. The infogroups can be defined depending on the user group (user parameter "UGR").

You can also specify that the infogroup is dependent on an employee's organizational data, for example, *the company code, personnel area, personnel subarea, employee group*, and *employee subgroup*, by maintaining the **IGMOD** feature (*Infogroup modifier activity*).

In the *Operation field*, you can specify which operation is executed with the infotype. When you perform an action and create infotype records, the system checks to see whether an infotype record already exists. In this case, the system switches from *Create* to *Change*. Therefore, it generally only makes sense to use the operation *Create* (INS) for a hiring action. For all other actions, you should use the *Copy* (COP) function code. When you copy infotype records, the system suggests the start date of the action for the existing records. If no records exist for the infotype, the system switches to *Create*.

If a new record is to be created independently of existing records, choose the operation *Create for Actions* (INSS). In this case, the system will not switch to the *Change* operation (MOD).

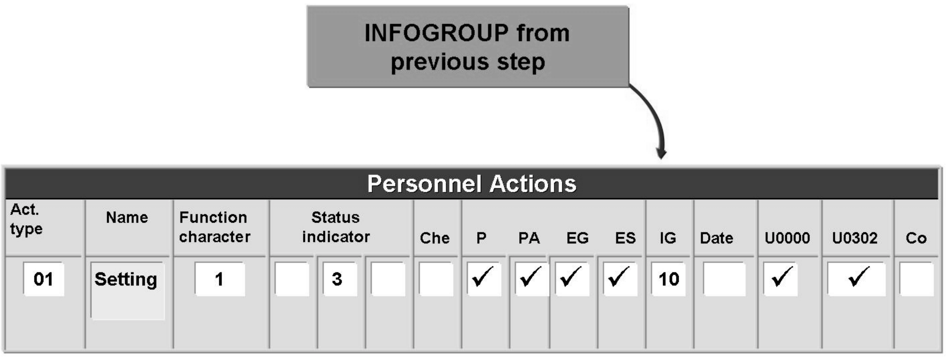


Figure 296: 2) Determining Personnel Action Types

To create an action:

- Assign a unique number and define a name for your personnel action.
- Use a **function character** to distinguish hiring actions from all other actions. Choose the function character 1 for an initial hiring, 7 for an initial hiring with data transfer from Recruitment and 0 for all other actions.
- You can maintain the customer-specific, employment, and special payment statuses using the *status indicator*.
- You can only use certain actions to change the *organizational assignment* of an employee. In this case, you can set the indicators for the *position, personnel area, employee group*, and *employee subgroup* to represent these as ready for input in the Personnel Actions initial screen.
- You can use the *Date* field to define whether the date entered on the initial screen of the personnel action should be the start date of new records or the end date of old records – this is particularly useful for leaving actions.
- Specify whether your new action should create a new *Actions* infotype record (0000).
- Use the indicator U0302 to determine whether the personnel actions are stored in the *Additional Actions* **(0302)** infotype.

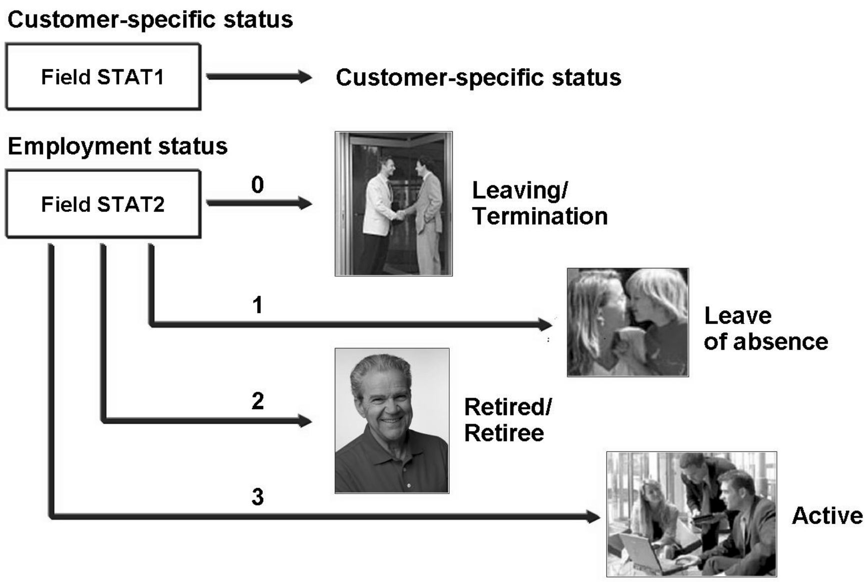


Figure 297: Change Personnel Actions Status Indicator

The status indicators in the *Actions* infotype are automatically maintained by the system if you execute an action. The status indicators have the following meaning:

- **Customer-specific status** - you can determine your own specific employee status with this indicator
- **Employment status**
  - Value 0 - The employee has left the company and should no longer be included in the payroll run. An individual retroactive run is permitted for him or her in the system.
  - Value 1 - The employee belongs to the company, but is granted leave for military service, maternity leave, or other absence reasons. In reality, most inactive contracts are not entered in the system as status changes but as absences. Payroll is run for inactive employees, but their pay can be reduced according to special factoring rules.
  - Value 2 - The employee is retired. If this person is entitled to a company pension, the system still includes this employee in the payroll run. If not, the system assigns specification 0 to this employee.
  - Value 3 - The employee belongs to the company and is active.
- **Special payment status** - for wage type decisions

Example: You want to run the Early Retirement / Retirement personnel action

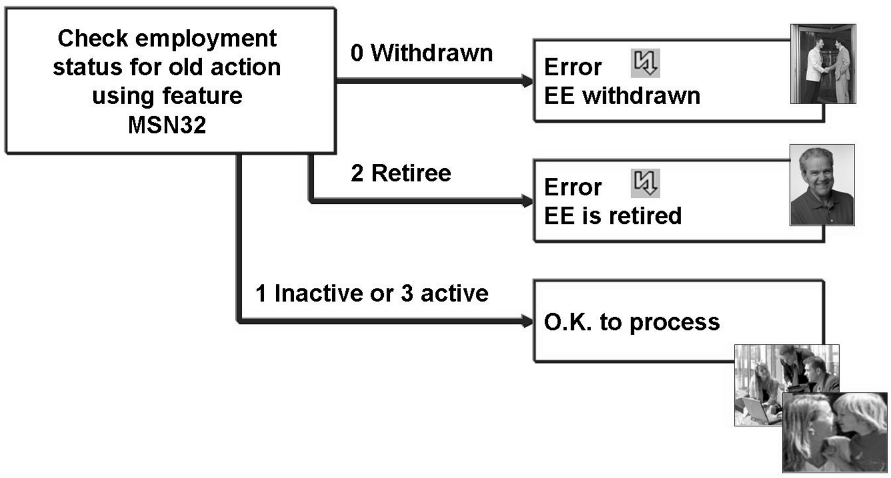


Figure 298: Checking Status Indicators When Executing Actions

When you execute a new action, the system checks whether the attributes of the new action match those of the previous action.

This check is controlled by the following features

- MSN20 for leaving
- MSN21 for hiring
- MSN32 for early retirement/retirement

These features check the old actions against the new, proposed action. This takes place, for example, if you want to execute an action to retire an employee. The action checks feature MSN32.

If the old action has:

- STAT2=0 → There is an error because the employee has already left the company
- STAT2=2 → There is an error because the employee has already retired
- STAT2=3 → The processing continues because the employee is active

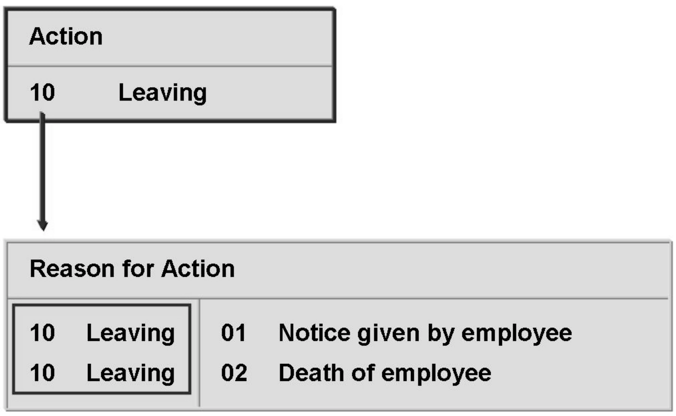


Figure 299: 3) Defining Reasons for Personnel Action Types

The action reason indicates why the action was triggered.

You can use this information to evaluate why employees leave or why they are transferred.

You must always enter at least one reason for each action, even if the entry is just a blank space.

Menu		User-dep.	Reaction	Ref.
01	Actions	X	W	01

Action menu

User group	No.	Action	
01	01	01	Hiring
01	02	02	Organ. Reass.
01	03	03	Leaving
..	..	..	. . .
01	09	99	Addition to family

Figure 300: 4) Changing The Actions Menu

You need to include the personnel action that you have just defined in the Personnel Actions menu. You can also define this menu so that it is dependent on a user group (user parameter *UGR*).

If there is no entry in the table for your user's user group or if you have not maintained your user group, the system displays the menu for the reference user group.

User-group dependency of actions menu: Specify whether menu “**01**” for the personnel actions should be dependent on the user group. Specify how the system responds if the user has not maintained the user group, and a reference user group so that the menu can be created.

Actions in the Actions menu: Enter the new action for the user group and define where the action will appear in the menu (field *no.*).

Additional Actions Infotype

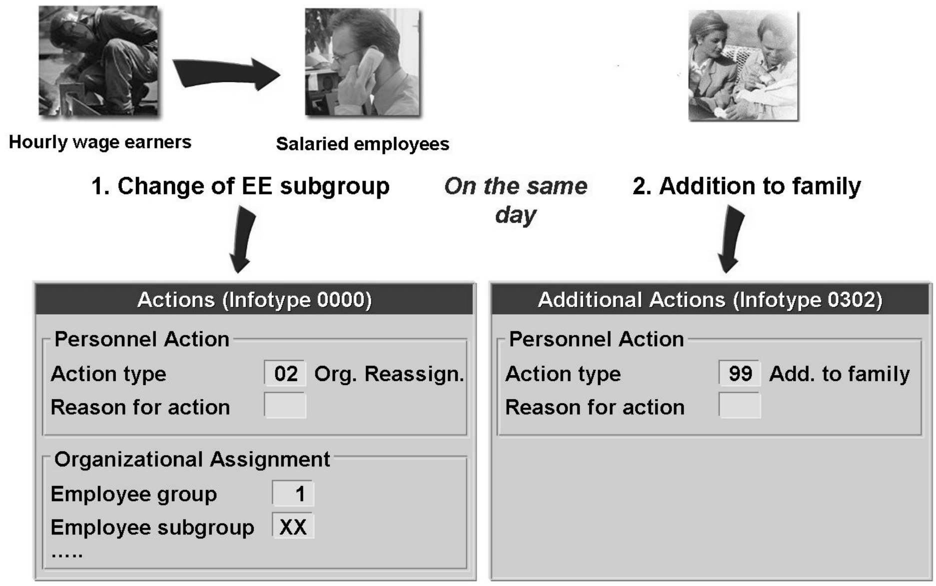


Figure 301: Additional Actions

The *Additional Actions (0302)* infotype allows you to log all personnel actions that you execute for an employee on the same day. The log records all the action types and the corresponding action reasons run for the employee according to a key date.

All programs that interpret an employee's status, evaluate the *Actions* infotype (0000) exclusively. This has the time constraint 1, which means that only one valid *Actions* infotype record can exist in the system at any one time for the employee's activity in the company.

Displaying Additional Actions in Actions Infotype

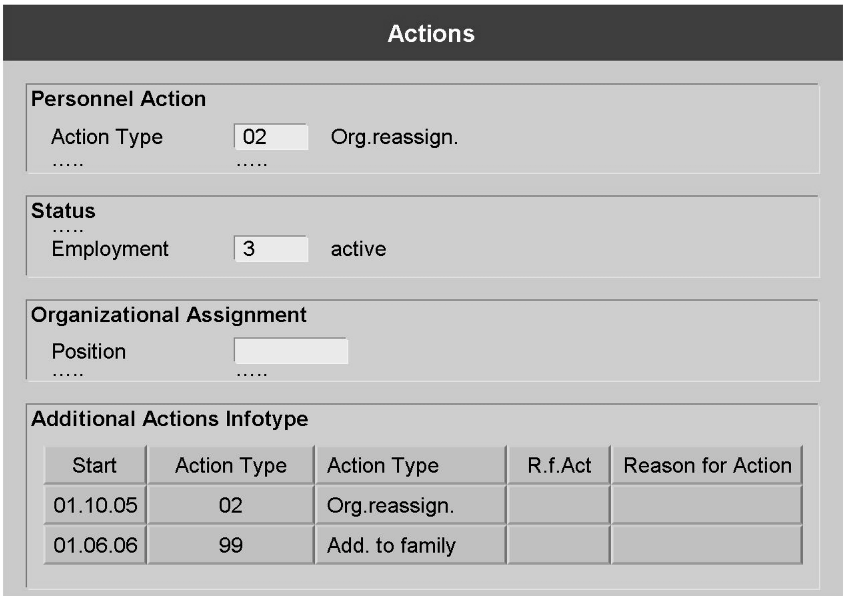


Figure 302: Displaying Additional Actions in Actions Infotype

Ensure that only one personnel action is saved in the *Actions* infotype (0000) per day. In Customizing, you can specify which action type should be stored, that is, which should be kept, for an employee per day if more than one personnel action was run for the employee on the same day. Usually, you should choose personnel actions whose status is changing, such as the *Leaving* personnel action, which causes a status change from *active* to *left*. The other action(s) are stored in IT0302.

Only action types and action reasons are saved in the *Additional Actions* infotype (0302).

Hint: You can not execute two different status-changing personnel actions for one employee on the same day. For example, you cannot run a leaving action and an early retirement/retirement action on the same day. In this case, one action would overwrite the other.

If you want to use the *Additional Actions* infotype (0302), use report RPUEVSUP to make the necessary entries:

Examples of Personnel Actions

- ***Leaving* personnel action**
  - **Status change in *Actions* infotype, employment status set to *withdrawn***
  - **Personnel number is not deleted**
  - **Certain infotypes are delimited**
  - **Other infotypes cannot be delimited**

Figure 303: Employee Leaves the Company

When an employee leaves the company, you cannot change certain infotypes because the system needs them to create a history. However, you must delimit some infotype records when an employee leaves the company.

When an employee leaves the company, his or her personnel number **cannot be deleted**.

When an employee leaves the company, a new Actions infotype record (0000) is created for the leaving action. This infotype record stores the leaving date and the reason for leaving. You must enter the reason for leaving for statistics and reporting purposes. When an employee leaves the company, the system automatically changes the employment status accordingly. Upon leaving the company, the employee has employment status 0. Payroll recognizes this status, and does not select this employee for inclusion in the subsequent payroll period. The system also does not select employees with status 0 for several other evaluations. You must leave organizational data, personal data, addresses, and basic payroll data in the system. You cannot delimit the data records, as the employee may still receive payments (for overtime or leave compensation, for example), or may still have to be contacted after the last payroll has been run. In addition to this, this data is also used for reporting purposes.

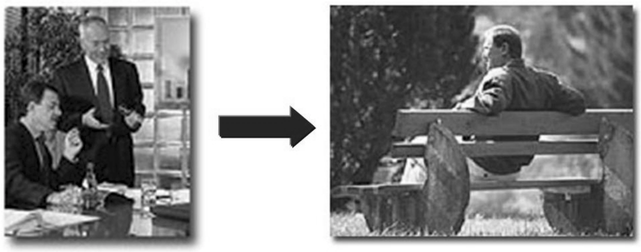
You cannot delimit the Basic Pay infotype (0008). If you delimit this infotype, the system cannot perform retroactive accounting correctly. If you do want to compensate an employee once he or she has left, then you can use either of the following infotypes: Recurring Payments/Deductions (0014) or Additional Payments (0015).

***Reentry* personnel action**

- Existing personnel number is used again
- Status change in *Actions* infotype, employment status set to *active*
- Start date entered into delimited infotypes

Figure 304: Employee Reenters the Company

The SAP system uses the term Reentry to mean an employee who has left the company and then re-enters the same company. The system uses the previous personnel number for such a personnel action. The system sets the employment status to 3 (for active) in the Actions infotype (0000) when you run the personnel reentry action. The system creates new infotype records for all infotypes delimited when the employee originally left the company. In the new records, the system uses the re-entry date as the start date.



***Early Retirement/Retirement* personnel action**

- Status change in *Actions* infotype, employment status set to *Retiree*
- Employee group *Retiree* and employee subgroup *Retiree*
- Company pension entered into the *Basic Pay* infotype

Figure 305: Retiree with Company Pension

If one of your active employees retires or goes into early retirement, you need to run the relevant personnel action. The system automatically sets the status field in the Actions infotype to 2 for retiree. You must assign the employees to employee group Retiree, and to employee subgroup Retiree. To pay the pension, simply enter the corresponding wage type in the Basic Pay infotype.

If an employee who left the company years ago is now entitled to a company pension, you must first run a reentry action, followed by the retirement action.

***Hiring* personnel action**

- **Employee is hired and given a second personnel number**
- **Employment status set to *active***
- **Employee group *Active* and employee subgroup *Night shift security guard***
- **Previous personnel number with employment status *Retiree* is referenced**

Figure 306: Retiree Working as a Night Shift Security Guard

If an employee entitled to a company pension works as a night shift security guard in your company, for example, you must hire him or her with a new personnel number. This ensures the employee receives employment status 3 (active) with the second personnel number, and that the system assigns the employee to the employee group 'Active' and the employee subgroup 'Night shift security guard'.

To refer to the previous personnel number, use the *Reference personnel number* field in the *Organizational Assignment* infotype. This field is available when you perform a hiring action.

You need to create a second personnel number because the money earned as a night shift security guard is taxed according to different tax guidelines.

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Exercise 29: Personnel Actions

Exercise Duration: 15 Minutes

Exercise Objectives

After completing this exercise, you will be able to:

- Set up personnel actions and define them for different user groups

Business Example

The personnel administrators need a personnel action that groups together all the necessary infotypes that need to be maintained when an employee has a child. Since your company gives employees a one-off payment of EUR 200 for the birth of a child, you should also incorporate this in the personnel action.

In addition, this personnel action should appear for users in the ##+50 user group only.

Task 1:

For the following exercise, use this overview to find out the relevant infogroup and action type for you.

Group Course Partici-pants	Info-group	Action type	Group Course Partici-pants	Info-group	Action type
00	M0	A0	16	N6	B6
01	M1	A1	17	N7	B7
02	M2	A2	18	N8	B8
03	M3	A3	19	N9	B9
04	M4	A4	20	P0	C0
05	M5	A5	21	P1	C1
06	M6	A6	22	P2	C2
07	M7	A7	23	P3	C3
08	M8	A8	24	P4	C4
09	M9	A9	25	P5	C5
10	N0	B0	26	P6	C6
11	N1	B1	27	P7	C7
12	N2	B2	28	P8	C8
13	N3	B3	29	P9	C9
14	N4	B4	30	Q0	D0
15	N5	B5			

Create a new Addition to Family Gr.## action to include the following infotypes:

• *Personal Data (0002)*: Copy

• *Family/Related Person (0021), subtype Child:* Call using dynamic action

• *Additional Payments (0015), subtype M610:* Create new record. If a record of this infotype already exists, use this as a template.

1. Create a user group dependent infogroup (see table for namespace) in which the *Personal Data (0002)* and *Additional Payments* (0015) infotypes are copied or created for user group 50 + ##. If a user has reference user group 01, only copy infotype 0002.

Continued on next page

2. Create a new personnel action (see table for namespace of action type) in which users can access the infogroup just created. This personnel action should have the following characteristics:

   Since the data on organizational assignment should not change, these fields are not ready for input in the initial screen of the personnel action.

   Store in *Additional Actions (0302)* infotype only (not in the *Actions (0000)* infotype).

3. Enter at least two reasons for your new action (of your choice, for example, *Birth of a child* or *Adoption of a Child*).

4. Include the personnel actions *Early retirement/Retirement, Leaving, Reentry into Company, Hiring HR305*, and the personnel action you have just created, *Addition to Family GR.##*, in your user group ##+50.

Task 2:

Do the following exercises:

1. On the first day of this month, your employee Winnie Chung (540991##) had a baby. Perform your newly created *Addition to Family GR.##* personnel action for Winnie and also assign her the bonus payment of EUR 200.

Task 3:

Do the following tasks: **(optional)**

You want to execute different additional personnel actions for the sales executive you hired on the first day of the course (pers. no. 305991##):

1. *Employee 305991##* is laid off on the first day of this week. Use the personnel action *Leaving* to execute this action.

2. Re-hire employee *305991##* as of tomorrow. Use the *Reentry into company* personnel action to execute this action.

3. Your employee *305991##* will retire next Monday. Use the *Early retirement* personnel action to process this employee's retirement.

Solution 29: Personnel Actions

Task 1:

For the following exercise, use this overview to find out the relevant infogroup and action type for you.

Group Course Partici-pants	Info-group	Action type	Group Course Partici-pants	Info-group	Action type
00	M0	A0	16	N6	B6
01	M1	A1	17	N7	B7
02	M2	A2	18	N8	B8
03	M3	A3	19	N9	B9
04	M4	A4	20	P0	C0
05	M5	A5	21	P1	C1
06	M6	A6	22	P2	C2
07	M7	A7	23	P3	C3
08	M8	A8	24	P4	C4
09	M9	A9	25	P5	C5
10	N0	B0	26	P6	C6
11	N1	B1	27	P7	C7
12	N2	B2	28	P8	C8
13	N3	B3	29	P9	C9
14	N4	B4	30	Q0	D0
15	N5	B5			

Create a new Addition to Family Gr.## action to include the following infotypes:

• *Personal Data (0002)*: Copy

• *Family/Related Person (0021), subtype Child:* Call using dynamic action

Continued on next page

• *Additional Payments (0015), subtype M610:* Create new record. If a record of this infotype already exists, use this as a template.

1. Create a user group dependent infogroup (see table for namespace) in which the *Personal Data (0002)* and *Additional Payments* (0015) infotypes are copied or created for user group 50 + ##. If a user has reference user group 01, only copy infotype 0002.

   a) IMG: *Personnel Management → Personnel Administration → Customizing Procedures → Actions → Define infogroups*

   b) Choose *User Group Dependency from menus* and *infogroups*in the *Choose Activity* dialog box.

   c) Choose New Entries, and then enter the following information in the table:

Menu	Field Text	User grp. dep.	Reaction	Ref.
See infogroup assignment in the table	*Infogroup ## Addition to Family*	✓		*01*

   d) Choose Save and return to the *Choose Activity* dialog box. Select the *Infogroups* action.

   e) In the *Determine Work Area: Entry* dialog box, enter your infogroup and choose *Continue*.

   f) Choose *New entries*

   g) Make the following entries in the table:

User Group	Info-grp. modif.	No.	Opera-tion	Infotype	SC	Info-type text	Sub-type
## + 50		*01*	*COP*	*0002*			
## + 50		*02*	*INS*	*0015*			*M610*
01		*01*	*COP*	*0002*			

   h) Save your entries and ignore the warning message stating that no entries exist for your reference user group.

   i) Return to the IMG.

Continued on next page

2. Create a new personnel action (see table for namespace of action type) in which users can access the infogroup just created. This personnel action should have the following characteristics:

   Since the data on organizational assignment should not change, these fields are not ready for input in the initial screen of the personnel action.

   Store in *Additional Actions (0302)* infotype only (not in the *Actions (0000)* infotype).

   a) To create the action, choose the following IMG menu path:

   b) IMG: *Personnel Management → Personnel Administration → Customizing Procedures → Actions → Set up personnel action types*

   c) In the *Choose Activity* dialog box, select *Personnel Action types*.

   d) Choose *New entries* and enter the following information in the table:

Action Type	Name of Action Type	FC	Status			P	P	P	E	E	Info Group	D	U000	U0302	C
Your action type acc. to table	Addition to Family Gr ##	0					☐	☐	☐	☐	Your info group acc. to table		☐	☑	☐

Figure 307: Data Table:

   e) Save and return to the main IMG.

3. Enter at least two reasons for your new action (of your choice, for example, *Birth of a child* or *Adoption of a Child*).

   a) IMG: *Personnel Management → Personnel Administration → Customizing Procedures → Actions → Create reasons for personnel actions*

   b) Create the following two new entries:

Action type	Name of Action Type	Action Reason	Name
Your action type	*Addition to Family Gr ##*	*01*	*Birth of child*
Your action type	*Addition to Family Gr ##*	*02*	*Adoption of a child*

   c) Choose *Enter*, save your entries, and return to the IMG.

Continued on next page

4. Include the personnel actions *Early retirement/Retirement, Leaving, Reentry into Company, Hiring HR305*, and the personnel action you have just created, *Addition to Family GR.##*, in your user group ##+50.

   a) *Personnel Management → Personnel Administration → Customizing Procedures → Actions → Change action menu*

   b) Choose *User Group Dependency from menus* and *infogroups*in the *Choose Activity* dialog box.

   c) Ensure that the *User group dependency* indicator for the actions menu *01* is set.

   d) Return to the *Choose Activity* dialog box.

   e) In the *Choose Activity* dialog box, select *Personnel Action menu*.

   f) In the dialog box, enter *01* in the Menu field and then choose *Continue*.

   g) You can copy existing entries of user group *00* to make data entry easier.

   h) To do so, select the actions used in the exercises for the *00* user group and choose *Copy as ...*

   i) Change the user group *00* to your user group (##+50).

   j) Choose *Enter* and *Save*. To create the new entry shown in the table below, choose *New Entries*:

User Group	No.	Action Type	Name of Action Type
##+50	*for example, 30*	*Your action type*	*Addition to Family Gr ##*

   k) Save your data and return to the IMG.

Continued on next page

Task 2:

Do the following exercises:

1. On the first day of this month, your employee Winnie Chung (540991##) had a baby. Perform your newly created *Addition to Family GR.##* personnel action for Winnie and also assign her the bonus payment of EUR 200.

    a) Easy Access Menu: *Human Resources → Personnel Management → Administration → HR Master Data → Personnel Actions.*

    b) In the *Personnel number* field, enter *540991##* and then in the *From* field, enter the first day of the month.

    c) Locate your new action (*Addition to Family GR. ##)*, select it, and then choose *Execute*.

    d) In the *Actions infotype (0000)*, enter one of the reasons you created in Customizing for the personnel action and choose *Save*.

    e) In the *No. child.* field of the *Personal Data infotype (0002)*, enter the value *1* and also maintain the *Family/Related Person infotype (0021)*, which is called using the dynamic action, with entries of your choice. Confirm any warning messages.

    f) If additional infotypes, such as Create Child Allowance, are called by the dynamic action, skip these by choosing *Cancel* until the *Additional Payments* infotype (0015) appears.

    g) Assign EUR 200 as the amount of the bonus payment. Finally, save this last infotype, *Additional Payments (0015)*, of the personnel action and return to the initial screen.

Continued on next page

Task 3:

Do the following tasks: **(optional)**

You want to execute different additional personnel actions for the sales executive you hired on the first day of the course (pers. no. 305991##):

1. *Employee 305991##* is laid off on the first day of this week. Use the personnel action *Leaving* to execute this action.
   a) *Human Resources → Personnel Management → Administration → HR Master Data → Personnel Actions.*
   b) Enter the personnel number *305991##.*
   c) Enter the first day of this week as the start date.
   d) Select the *Leaving* personnel action.
   e) Choose *Execute*, and process the individual infotypes:
   f) If the system prompts you to do so, create the vacancy for the default date.
   g) If the system prompts you to do so, select the personnel officer Mike Hire on the *Create Vacancy* screen and save the data.
   h) Return to the *Personnel Actions* screen.
2. Re-hire employee *305991##* as of tomorrow. Use the *Reentry into company* personnel action to execute this action.
   a) Enter tomorrow's date as the start date.
   b) Select the action *Reentry into company*.
   c) Choose *Execute*, and process the individual infotypes:
   d) Select a position in the Caliber 'A' Bicycle Company using the *Structure search* function.
   e) Save your entries, and return to the *Personnel Actions* screen.
3. Your employee *305991##* will retire next Monday. Use the *Early retirement* personnel action to process this employee's retirement.
   a) Enter the start date as Monday of next week.
   b) Select the *Early retirement* personnel action.
   c) Choose *Execute*, and process the individual infotypes:
   d) If the system prompts you to do so, create the vacancy for Monday of next week.
   e) Save your entries and return to the SAP Easy Access menu.

Lesson Summary

You should now be able to:

- Configure personnel actions
- Give examples of personnel actions

Unit Summary

You should now be able to:

- Configure personnel actions
- Give examples of personnel actions

Unit 19

537

Global Employment

Further information can be found in the Instructor Guide in SAPNet.

Unit Overview

This unit discusses employees being sent to another country. You will learn about the individual phases of the global assignment.

Unit Objectives

After completing this unit, you will be able to:

- Name the terms related to Global Employment
- Explain the support provided in the “Planning a Global Assignment” phase
- Explain the support provided in the “Preparation for Relocation” phase
- Explain the support provided in the “Transfer” phase
- Explain the support provided in the “Duration of Global Assignment” phase
- Explain the support provided in the “Repatriation” phase

Unit Contents

Lesson: Global Employment

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Lesson Duration: 15 Minutes

Lesson Overview

Global Employment

- Terms related to Global Employment
- Planning a Global Assignment
- Preparation for Relocation
- Transfer
- Duration of Global Assignment
- Repatriation
- Payroll for Global Employees

Lesson Objectives

After completing this lesson, you will be able to:

- Name the terms related to Global Employment
- Explain the support provided in the “Planning a Global Assignment” phase
- Explain the support provided in the “Preparation for Relocation” phase
- Explain the support provided in the “Transfer” phase
- Explain the support provided in the “Duration of Global Assignment” phase
- Explain the support provided in the “Repatriation” phase

For more information, see the Instructor Guide in SAPNet.

Business Example

You should familiarize yourself with the individual phases of Global Employee Management.

General

Global Employment - Terms

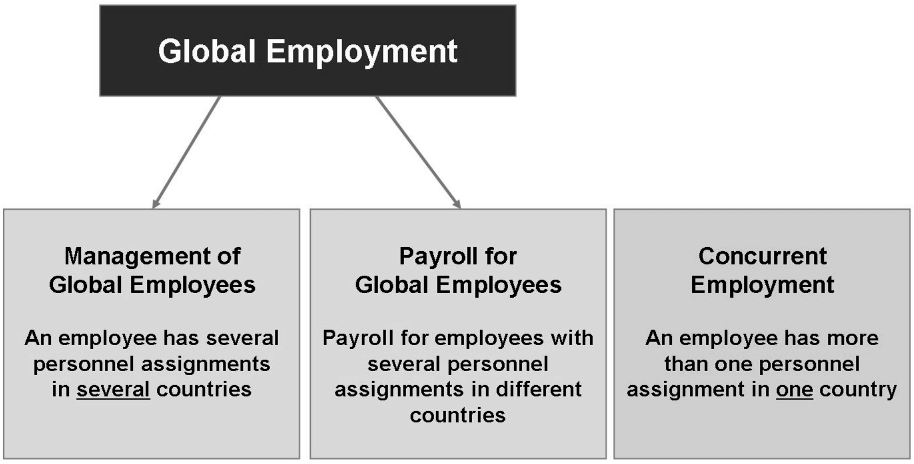

Figure 308: Global Employment - Terms

The following components come under the superordinate term Global Employment:

An employee has various personnel assignments in different countries in Management of Global Employees.

The payroll solution for Global Employment is called Payroll for Global Employees

There is also the additional component Concurrent Employment for when an employee has several personnel assignments in one country. The person ID concept is the same as for Management of Global Employees. Concurrent Employment is only released for some countries.

Examples: Concurrent Employment

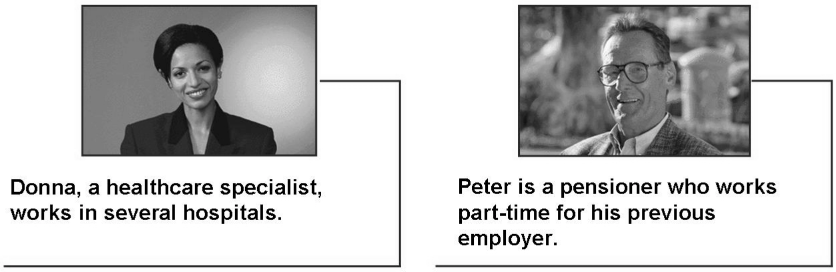

Figure 309: Examples: Concurrent Employment

Here are two examples where Concurrent Employment can be used.

Example: Global Employee

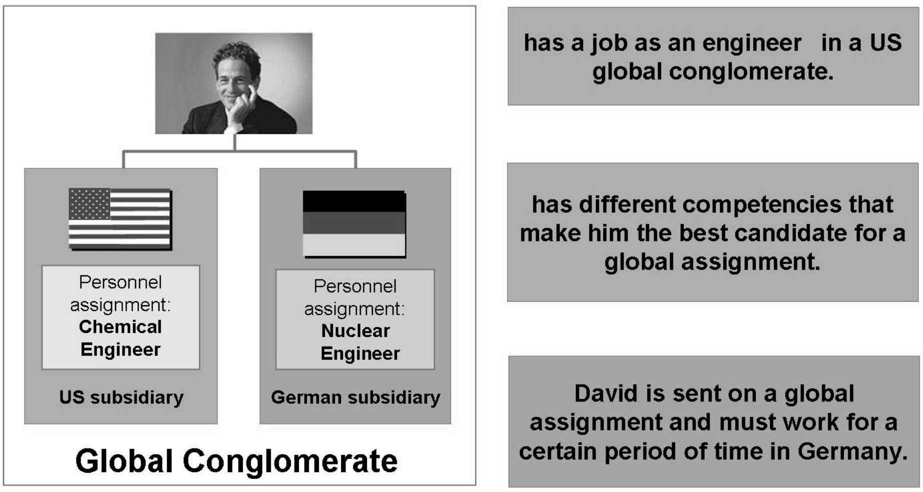

Figure 310: Example: Global Employee

Management of Global Employees is available as of SAP R/3 Enterprise - HR Extension 1.1.

A global employee can complete one or multiple global assignments for his or her global company.

The Concurrent Employment Model in mySAP HR shows the relationship between employee and employer. The most important concepts in the management of global employees are as follows:

- Each employee can have several personnel assignments, each in a different country.
- Each personnel assignment is linked to the person.

A personnel assignment outlines the activities that the person is to perform, the country of the global assignment, and additional features. Therefore a unique personnel number is assigned to each personnel assignment in mySAP HR.

Concurrent Employment Model

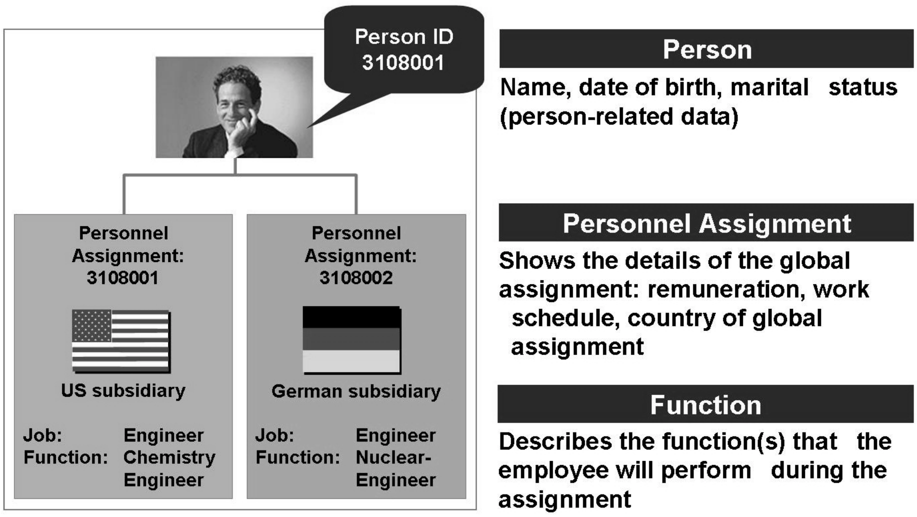

Figure 311: Concurrent Employment Model

With the person ID, you can track the global employee throughout his or her time of employment in the company. The person ID can be assigned alphanumerically.

The person ID is stored in the "Person ID" infotype (0709). This infotype can be maintained just like all other infotypes. We recommend however, that the person ID may only be changed by end users in exceptional cases. Since the infotype exclusively contains the person ID, the authorization for this infotype should be controlled.

Needless to say, after going productive, no changes should be made to the creation rule for person IDs.

Before the person ID is activated, you must ensure that the "Person ID" infotype (0079) is valid for all personnel assignments in the system. You can do this by running the report "HR_CE_GENERATE_PERSONID_EXT".

The Person ID Concept

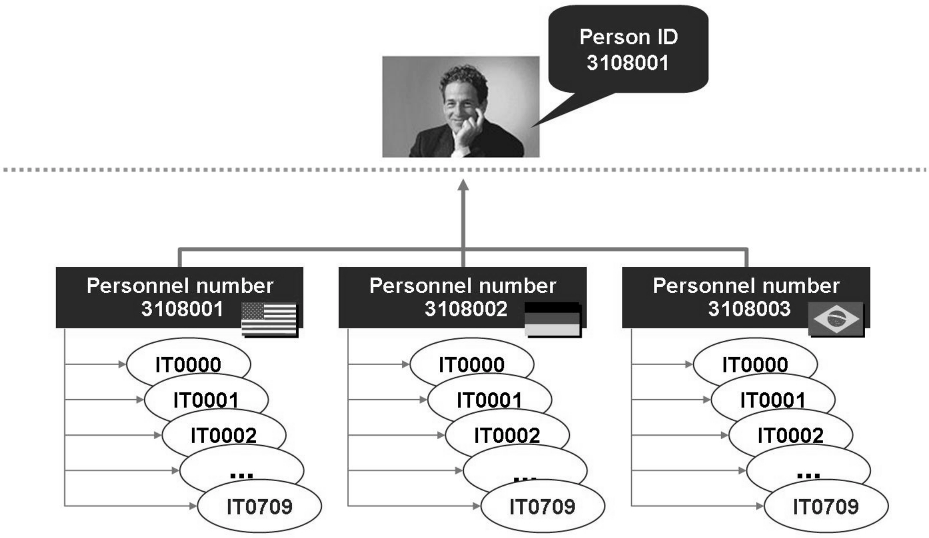

Figure 312: The Person ID Concept

In the infotype 0709, the personnel number (personnel assignment number) is linked to a person ID.

The person ID number is alphanumeric and can be 20 characters long. The number can either be assigned manually by the user or automatically by the system.

The Individual Phases

Global System Settings

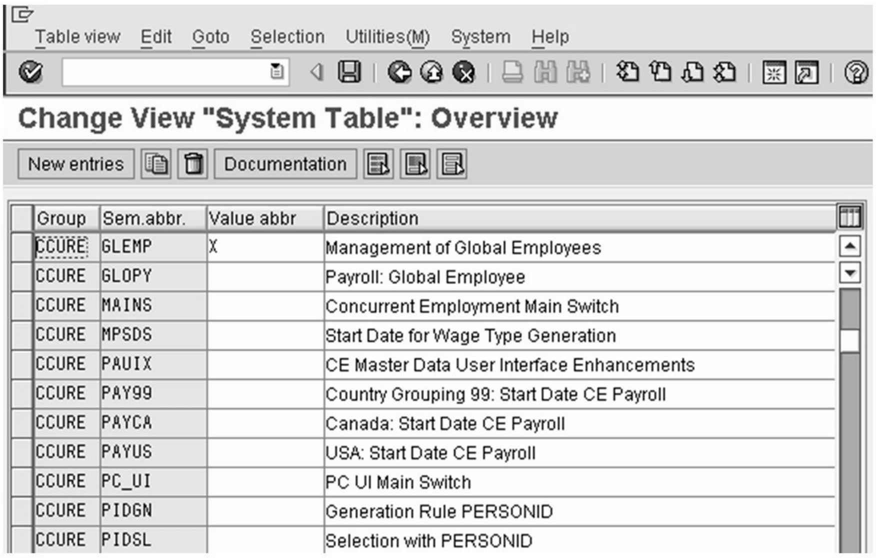

Figure 313: Global System Settings

Before Global Employment is activated, SAP investigates whether it makes sense to implement it. To this end, customers request a questionnaire from SAP and send it back when they have completed it. SAP then provides specific advice about what should be taken into account (Notes 540451 and 662136).

The central switches for setting up Global Employment can be set in table T77S0. The following switches are particularly important:

- **CCURE GLEMP**: You can activate *Management for Global Employees* with the switch CCURE GLEMP. This switches on the new infotype framework and activates infotype 0709 "Person ID".
- **CCURE GLOPY:** You can activate *Payroll for Global Employees* with this switch. When the switch CCURE GLOPY is switched on, SAP R/3 automatically sets the switch CCURE PAUIX.
- **CCURE MAINS:** Activates the enhanced functions for Concurrent Employment. Activating this switch usually requires further activities and frequently also table conversions.
- **CCURE PAUIX:** The following functions are activated or deactivated using the switch CCURE PAUIX:
  - List box display for the contract information on the Personnel Administration initial screens and on the list screens
  - Employee recognition for hiring action
- **CCURE PIDGN:** Controls the generation rule for the structure of the external person ID (4 different options)
- **CCURE PIDSL**: To use the person ID for entry to the maintenance of employee data, you must set the switch CCURE PIDSL to 'X'. All users are able to deactivate the use of the person ID on the initial screen by setting the parameter HR_CCURE_PIDSL in their user profiles to '-' (minus).

Phases in the Management of Global Employees

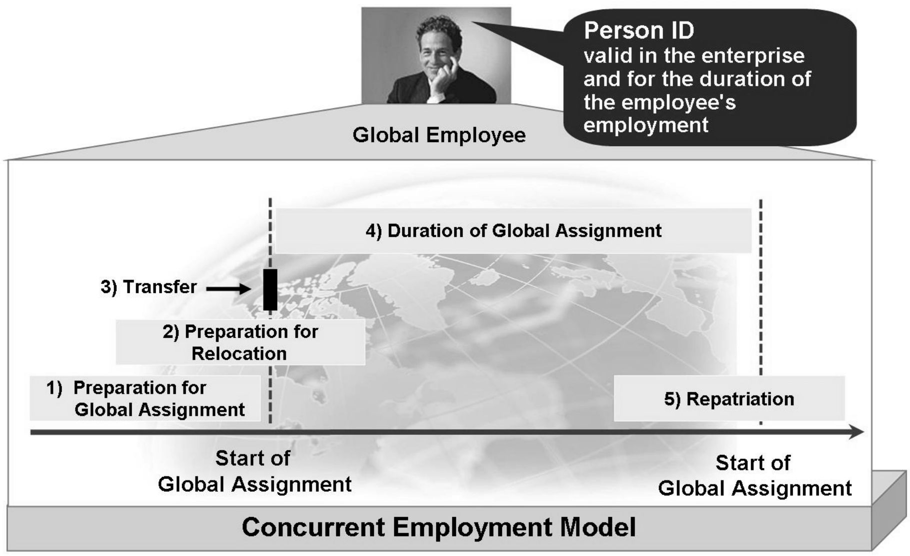

Figure 314: Phases in the Management of Global Employees

Global Employment has five separate phases:

- Planning a Global Assignment
- Preparation for Relocation
- Transfer
- Duration of Global Assignment
- Repatriation

Instead of the employee's current personnel number, a person ID number is used for Global Employment, under which the employee has multiple employment assignments.

Global Employment does not have a function that enables you to select employees who are particularly suited to a global assignment.

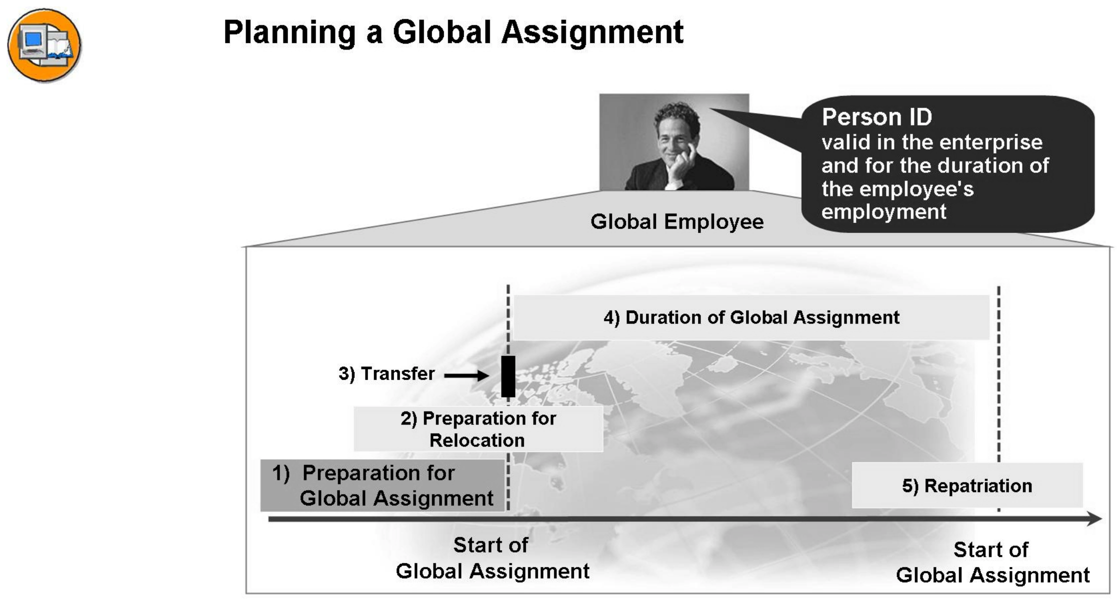

Figure 315: Planning a Global Assignment

Depending on the foreign assignment policy in your company, you can record all important data and create a global assignment:

- Type, Duration and Status of the Assignment
- Information regarding family
- Information regarding salary and compensation plan

An offer is created.

All those involved (manager in home country, employee, manager in the subsidiary abroad) have access to the same information.

The planning process for a global assignment can be adjusted according to your enterprise's global assignment policy.

Overview of Personnel Assignments

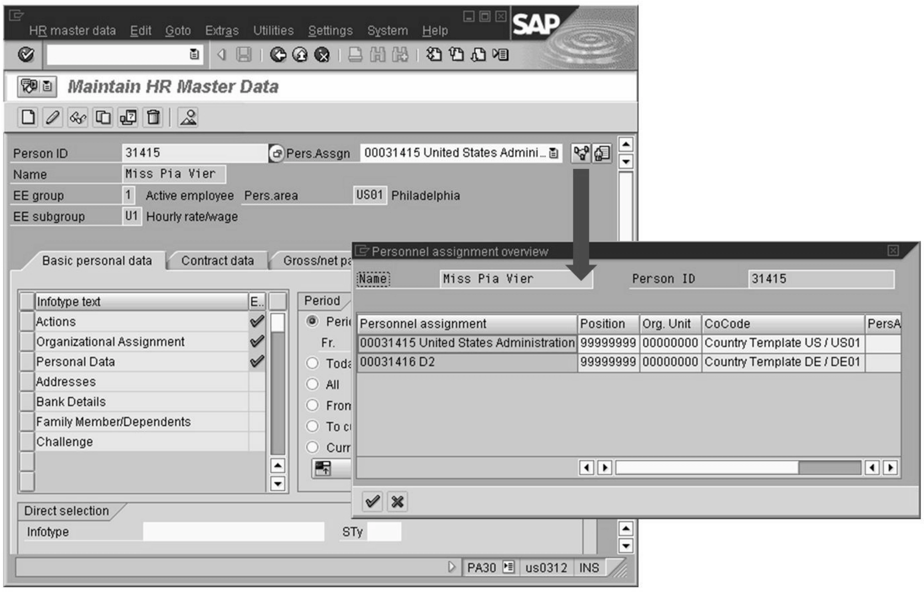

Figure 316: Overview of Personnel Assignments

If the selection occurs using the person ID, the system must know which personnel assignment the user wants to access.

The desired global assignment can be selected from the personnel assignment listbox.

In the Implementation Guide (IMG), maintain “Description of Personnel Assignments” (V_T587C_T) to select the required fields and layout settings.

Table Maintenance is simple and is similar to the Details screen. Ensure that the results fit into one line per foreign assignment.

The Overview of Personnel Assignments dialog box should provide a brief overview of the existing personnel assignments.

Personnel Action I

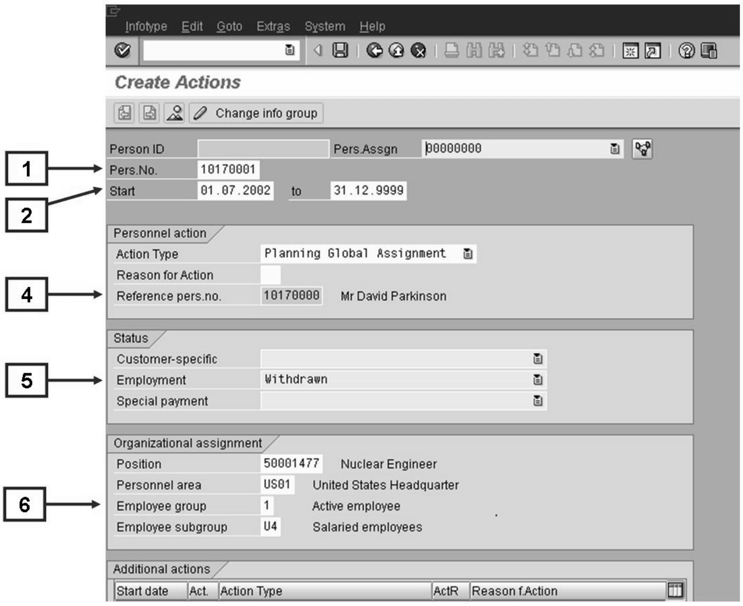

Figure 317: Personnel Action I

When a suitable employee has been found for a global assignment, the action "Planning Global Assignment" must be carried out for him or her. This action is already planned in the system, but must be included when needed in the Action Menu (see the unit Personnel Actions).

Follow the steps below to plan a global assignment:

1. Enter the personnel number. Depending on the settings, this can be manually entered or proposed by the system. The number is the number of the global assignment.
2. "Valid" refers to the planned start date of the global assignment
3. Choose Foreign Service Preparation as the action type.
4. The personnel reference number has nothing to do with and is not used in the Management of Global Employees.
5. The action has the status "withdrawn", which means that the system recognizes this action as a "planned" action.
6. You can enter the planned organizational assignment for the global employee in the new global assignment.

Personnel Action II

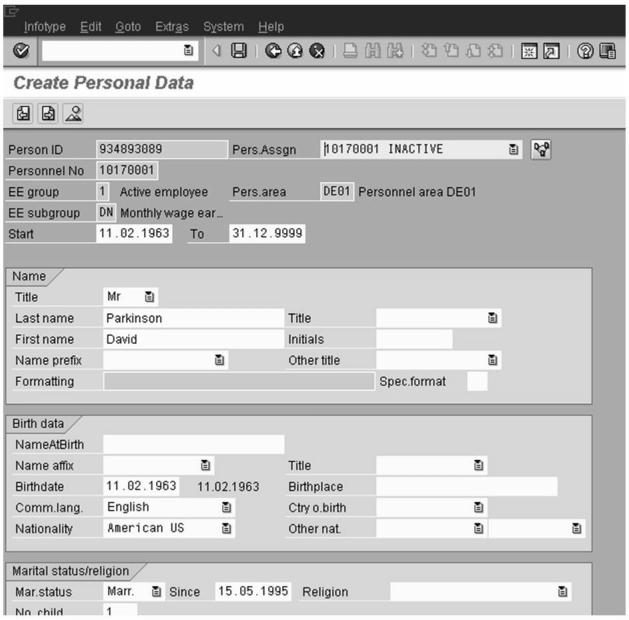

Figure 318: Personnel Action II

1. The header shows that this infotype is saved under the country grouping Germany (the country to which the employee is being sent). Ensure that the personnel assignment is configured to display this action as inactive. Although country-specific infotypes cannot be used in other countries, the "international part" of the infotype is defaulted from the infotype that already exists for the employee in the home country.

However, it is possible that in the infotype “Personal Data” other country-specific data must also be entered.

Depending on the information required by that country, additonal data may have to be entered.

Additional infotypes:

The main characteristics of the global assignment are determined in the infotype 0710. The information displayed here depends on your Customizing settings, which should reflect the foreign assignment policy of your company.

You can control the decison process in terms of the planned assignment using the Preparation of Global Assignment infotype. You can set the status required and change it according to the decision.

Compensation Package

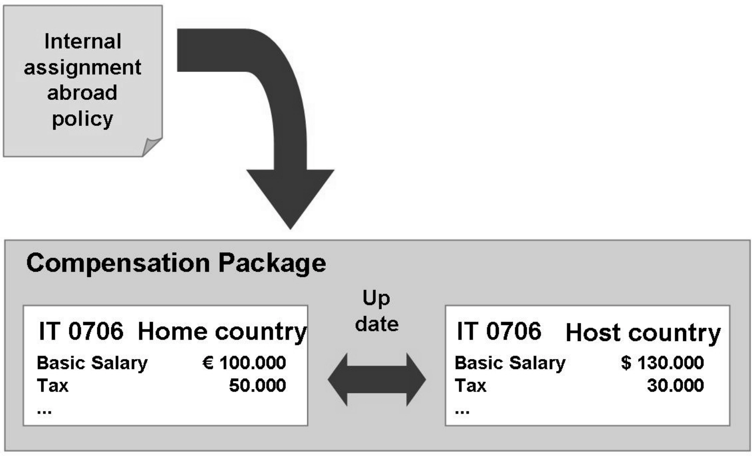

Figure 319: Compensation Package

The most important decision to make regarding a global assignment concerns the compensation package.

The compensation package is created using the Compensation Package Offer infotype (0706), which has two subtypes, one each for the home and host country. However, the system takes both into account as a large information package.

If an item is changed in the host country subtype, this can influence the values of several items in the home country subtype, depending on the Customizing settings. The Customizing settings should reflect the foreign assignment policy of your company.

A new infotype package is created if one of the two infotypes is changed during the negotiations.

Example of a Calculation of a Compensation Packet

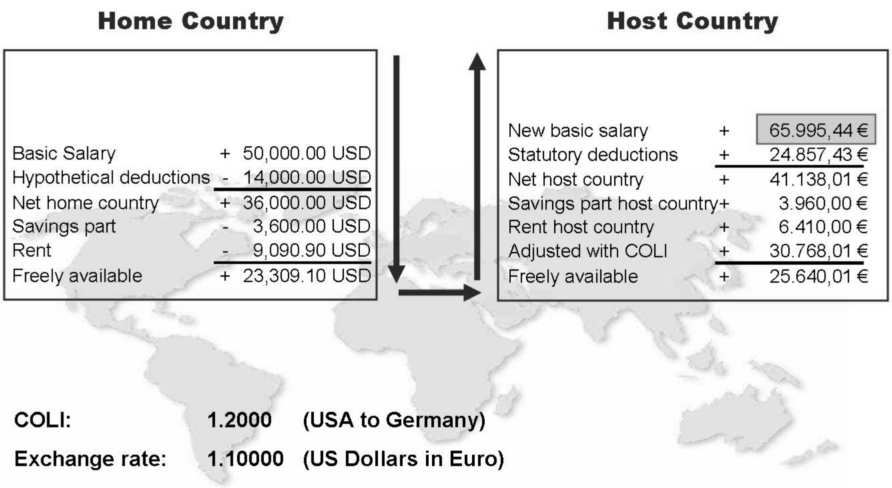

Figure 320: Example of a calculation of a compensation packet

If you wish, you can use the system to help calculate how high the basic salary should be for the employee in the country. For this, country-specifics such as tax deductions, cost signs and so on have to be taken into account.

Offer Letter

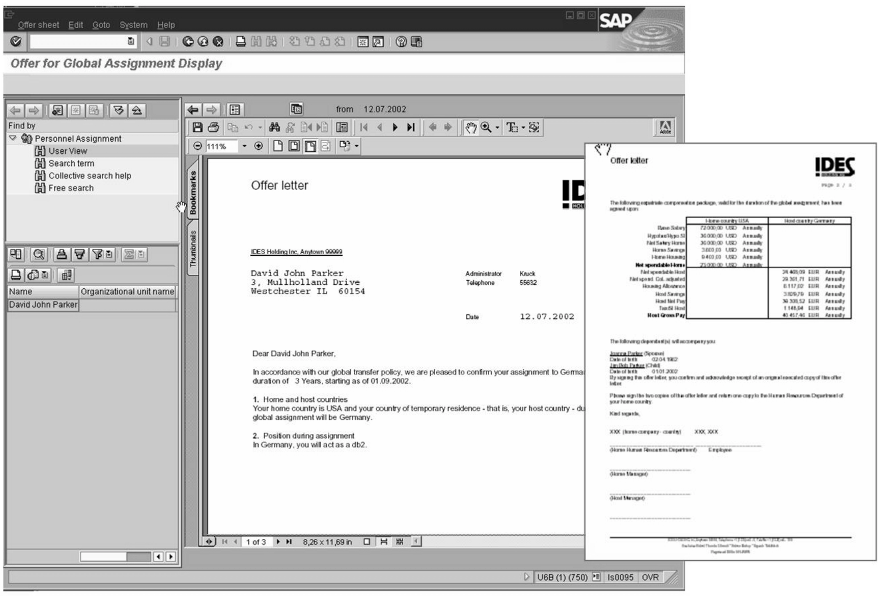

Figure 321: Offer Letter

After a suitable employee has been chosen, an offer letter based on a Word template can be produced.

2) Preparation for Relocation

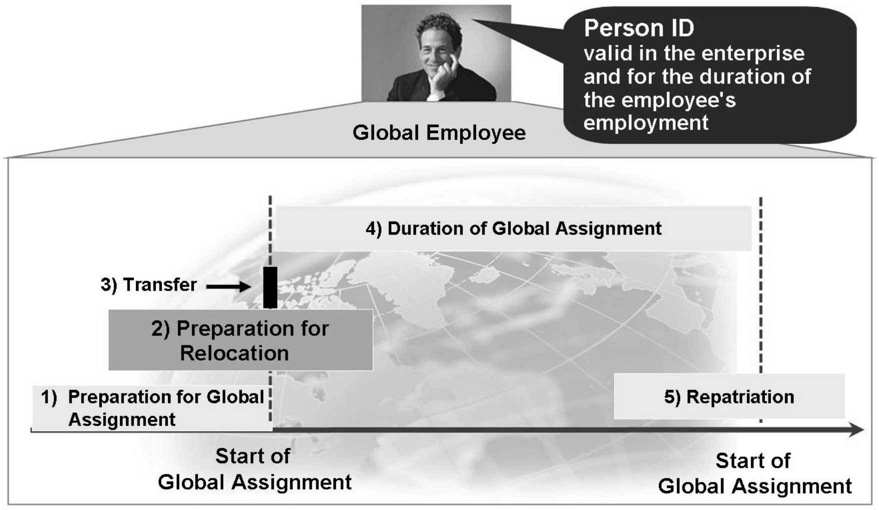

Figure 322: 2) Preparation for Relocation

Making flight reservations, applying for work and residency permits for the employee and his or her family, booking language courses, and so on.

The progress of this process can be monitored using the check list.

All those involved can display information applicable to them in the format desired using the different views of this check list to monitor the process.

Check List

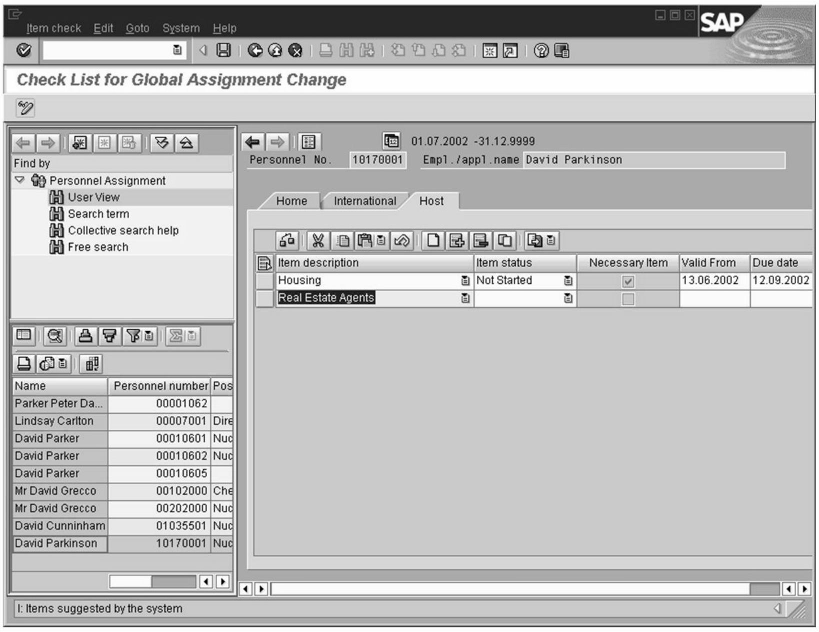

Figure 323: Check List

The international administrator can only process the check list for the global employees assigned to him or her.

The information is stored in the Check List Items infotype (0705).

Depending on your Customizing settings, you can set the items so that they are executed in the home country, host country, or in the international department. For each item, you must determine whether it is a prerequisite for the transfer, that is, whether it must be "completed" before the transfer.

3) Transfer

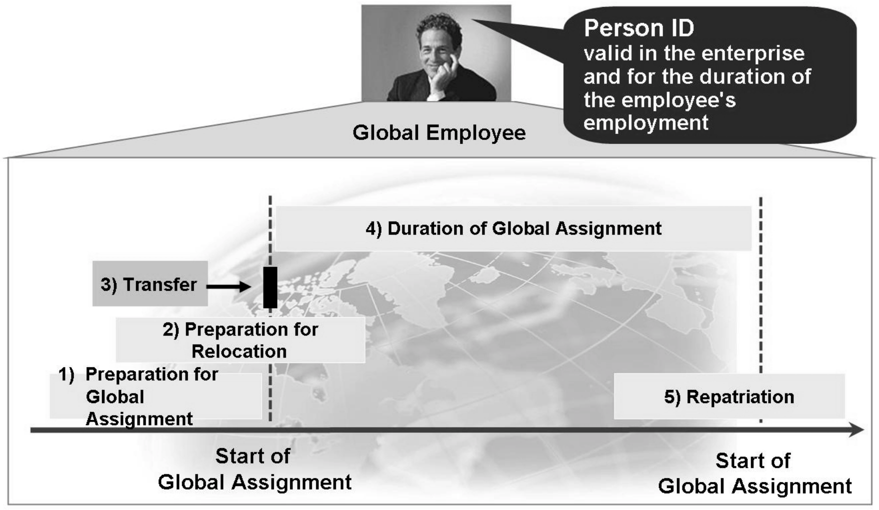

Figure 324: 3) Transfer

The decision was made for the global assignment to go ahead.

The assignment is activated in the home and host country.

Additional data is created or changed depending on the conditions agreed in the final offer.

The Basic Pay (0008), Recurring Payments and Deductions (0014), and Additional Payments (0015) infotypes are transferred from the Compensation Package infotype.

Technically, this is mapped through the two actions “Glob.Employ.Act.HostCountry” und “Glob.Employ.Act.HomeCountry”.

4) Duration of Global Assignment

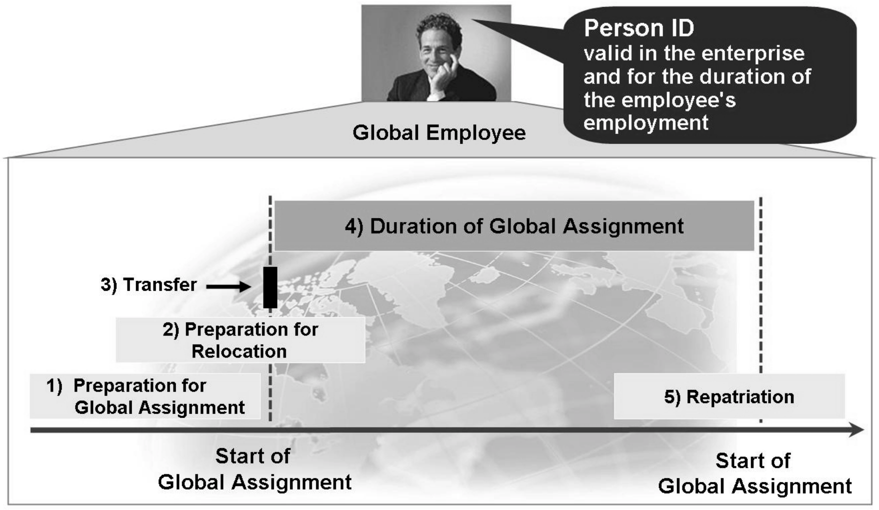

Figure 325: 4) Duration of Global Assignment

Payroll for the employee runs during the period abroad.

Payroll in Global Employment Area

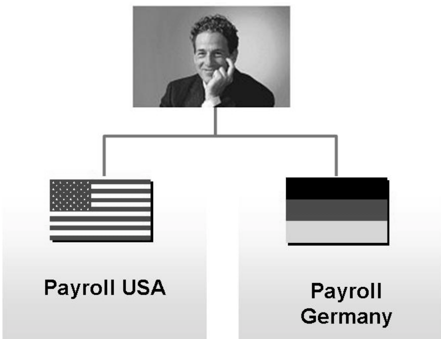

Figure 326: Payroll in Global Employment area

Payroll

Payroll can take place either in the host country or in the home country only, or in both. The latter may be necessary when, for example, an employee makes pension contributions in Germany despite working in another country. In this case, what is known as shadow income from the Basic Pay infotype is used.

Among other things, you must consider that payroll periods and currencies may be different in different countries, and wage types may be customized in such a way that they are only valid in one or other country.

Moreover, the residency types are registered to determine how much time was actually spent in the host country. (This is important for establishing in which country taxation must take place.)

5) Repatriation

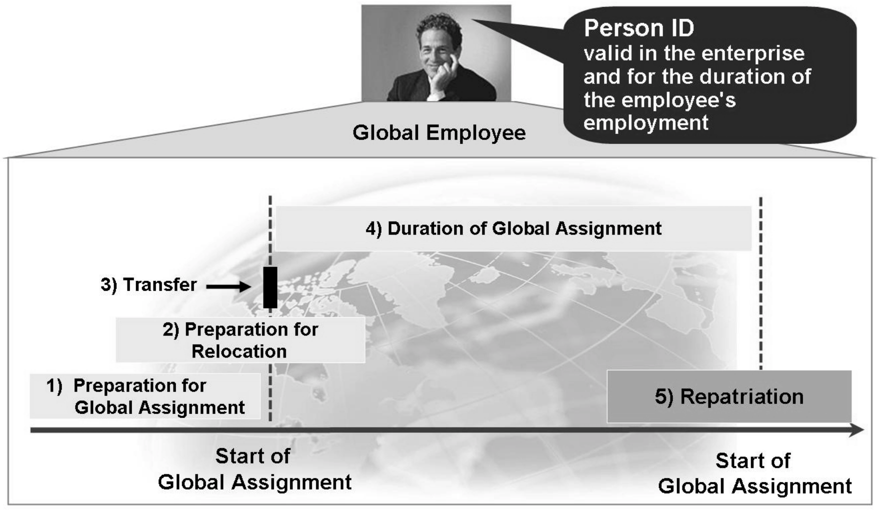

Figure 327: 5) Repatriation

A new global assignment must be assigned to the global employee before completion of the global assignment.

The global employee can either return to his or her home country or start a new global assignment.

The relocation process starts again from the beginning.

Facilitated Discussion

Discussion Questions

Use the following questions to engage the participants in the discussion. Feel free to use your own additional questions.

Lesson Summary

You should now be able to:

- Name the terms related to Global Employment
- Explain the support provided in the “Planning a Global Assignment” phase
- Explain the support provided in the “Preparation for Relocation” phase
- Explain the support provided in the “Transfer” phase
- Explain the support provided in the “Duration of Global Assignment” phase
- Explain the support provided in the “Repatriation” phase

Related Information

- Use a URL or cross-reference tag to point out additional information that the participants may find useful, such as Web sites or white papers. Delete this if not applicable.

Unit Summary

You should now be able to:

- Name the terms related to Global Employment
- Explain the support provided in the “Planning a Global Assignment” phase
- Explain the support provided in the “Preparation for Relocation” phase
- Explain the support provided in the “Transfer” phase
- Explain the support provided in the “Duration of Global Assignment” phase
- Explain the support provided in the “Repatriation” phase

Unit 20

559

HR Administrator and Employee Interaction Center

For more information, see the Instructor Guide in SAPNet.

Unit Overview

Unit Objectives

After completing this unit, you will be able to:

- Describe the portal role HR Administrator
- Describe Employee Interaction Center

Unit Contents

Lesson: HR Administrator

560

Lesson Duration: 15 Minutes

Lesson Overview

[Give a short overview of the lesson.]

Lesson Objectives

After completing this lesson, you will be able to:

- Describe the portal role HR Administrator

[Describe which information the instructor should provide to participants about the context of the course.]

Business Example

[Explain to participants about the practical use of this lesson for a company using a business example.]

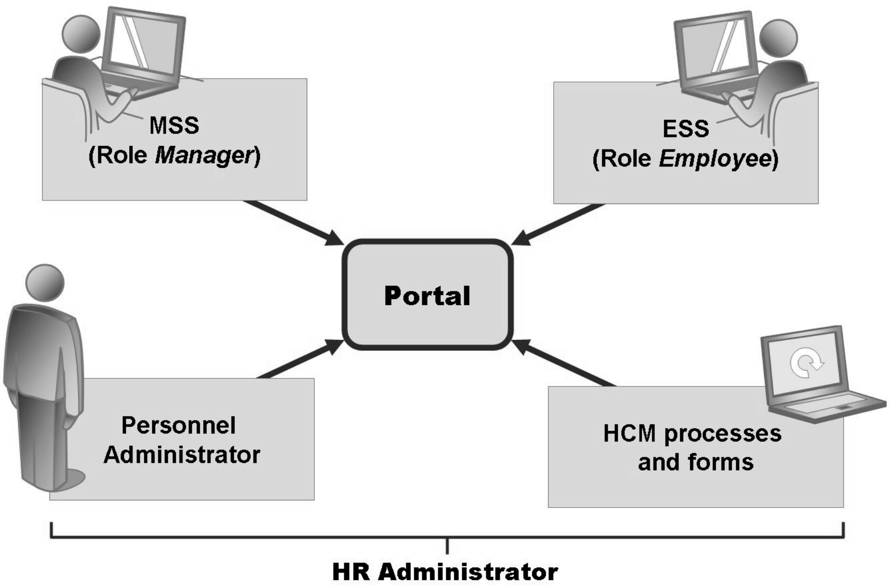

Figure 328: HR Administrator Role

HR – Administrator is another role in the portal which gives an administrator various options, depending on authorization. These options include:

- Maintaining employee data
- Editing processes that were triggered via workflows (attachments are also possible, if required)
- Various evaluations

HR Administrator – Display and Maintain Master Data

Figure 329: HR Administrator – Display and Maintain Master Data

Alongside the original goal of the HR Administrator to display employee data as in the traditional SAP system and maintain it using infotypes and actions, the main focus is on processes and reporting.

HR Administrator – Trigger/Further Process/Complete Processes

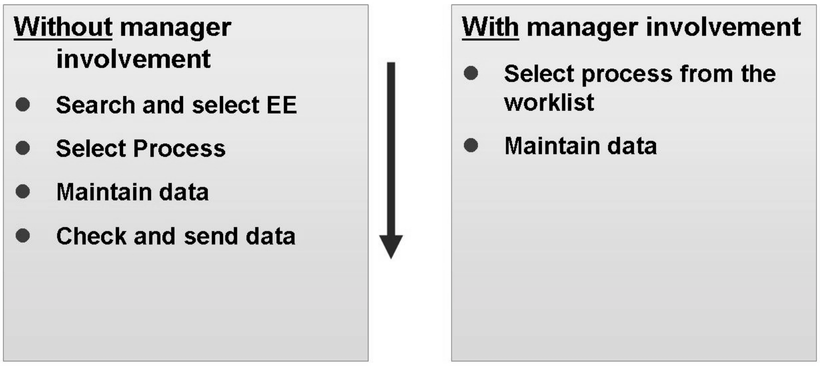

Figure 330: HR Administrator – Trigger/further process/complete processes

Many examples that turn up particularly frequently in practice are delivered by SAP as project templates. You can also define and store your own processes with any number of steps and assign them any role.

As part of HR Administrative Services, the universal worklist provides access to the current work items that the system has generated when processing a process within HCM Processes and Forms.

HR Administrator – Ex. Process "Transfer of an Employee" Without Involvement of a Manager

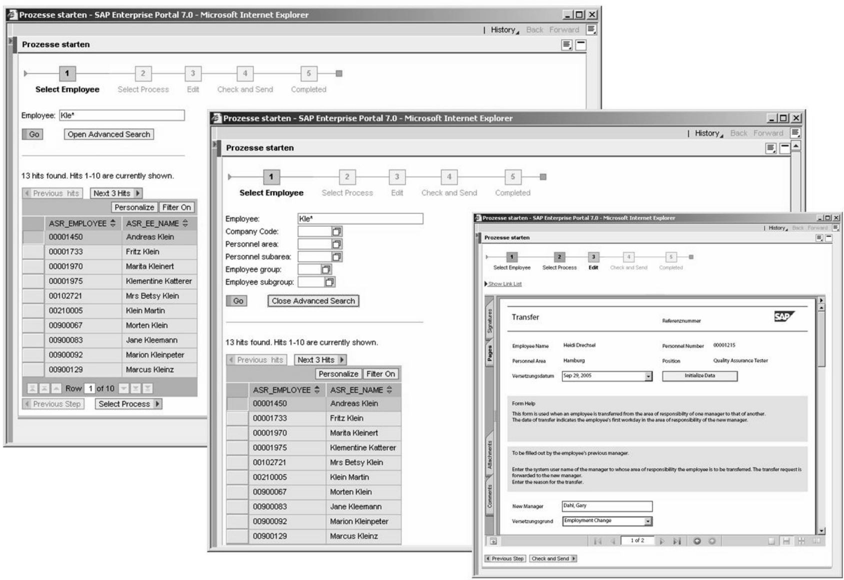

Figure 331: HR Administrator – Ex. Process "Transfer of an Employee" Without Participation of a Manager

If HR Administrators trigger the process themselves (Process Without a Manager) they proceed in the following way:

- Search for the employee
- Search for the process
- Maintain the data
- Save the data

HR Administrator – Ex. Process "Transfer of an Employee" With Involvement of Several Managers I

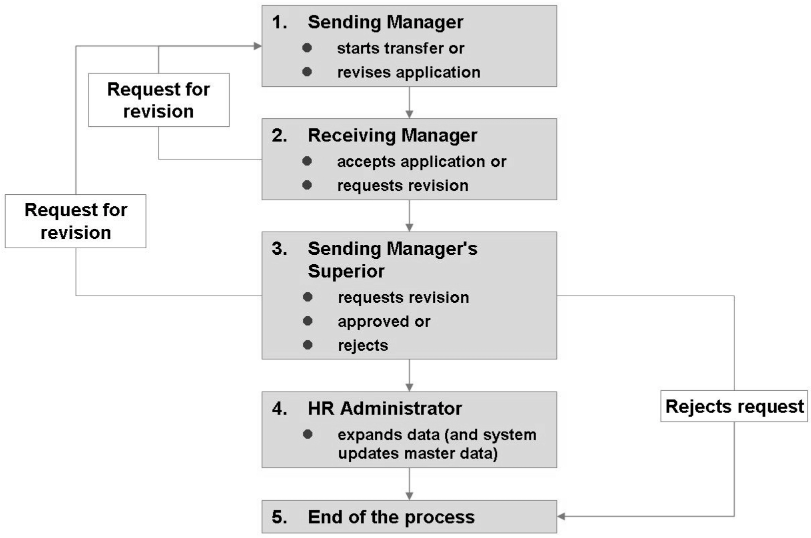

Figure 332: HR Administrator – Ex. Process "Transfer of an Employee" With Participation of Several Managers I

The process shown above illustrates the transfer of an employee. The *Transfer* process supports the organizational move of an employee to a new position that is outside the current manager's area of responsibility. After the process has been carried out, the system updates the master data for the employee in question. The business roles *Sending Manager*, *Receiving Manager*, *Superior of Sending Manager* and *HR Administrator* play an active part in carrying out the process. The employee in question is informed about the process via e-mail.

The process *Transfer* accelerates and optimizes the processing of a transfer, because the cross-role system integration guarantees the fastest possible forwarding of work items and communication without gaps between all parties concerned.

HR Administrator – Ex. Process "Transfer of an Employee" With Involvement of Several Managers II

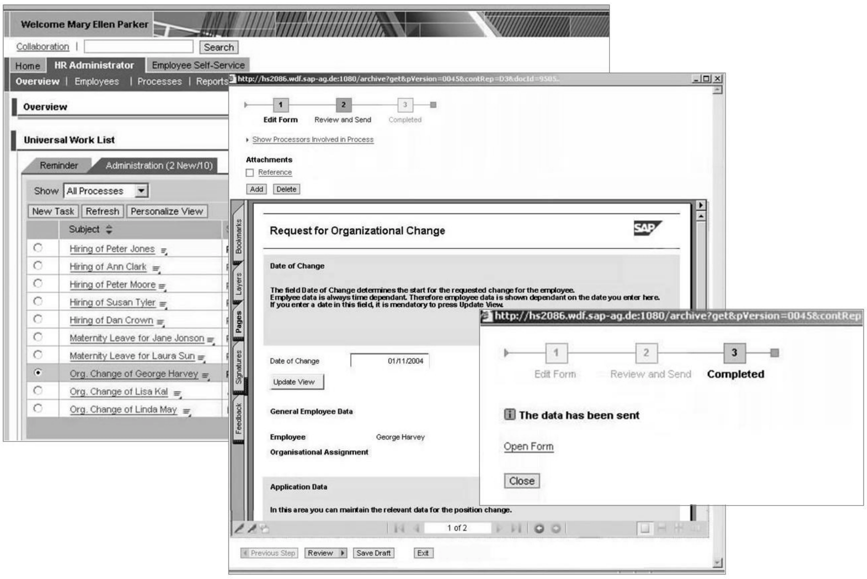

Figure 333: HR Administrator – Ex. Process "Transfer of an Employee" With Participation of Several Managers II

This shows the administrator's view. HR Administrators see a work item displayed in their worklist.

They maintain the corresponding data and save it.

Facilitated Discussion

Discussion Questions

Use the following questions to engage the participants in the discussion. Feel free to use your own additional questions.

Lesson Summary

You should now be able to:

- Describe the portal role HR Administrator

Lesson: Employee Interaction Center (EIC)

566

Lesson Duration: 15 Minutes

Lesson Overview

[Give a short overview of lesson.]

Lesson Objectives

After completing this lesson, you will be able to:

- Describe Employee Interaction Center

[Describe which information the instructor should provide to participants about the context of the course.]

Business Example

[Explain to participants about the practical use of this lesson for a company using a business example.]

- Reduce HR costs
- Maintain or improve service quality
- Use resources in HR more efficiently
- Create service transparency in HR
- Optimize accessibility
- Responsibilities not always clear
- Efficiency of communication contacts
- Consistency in HR service requests

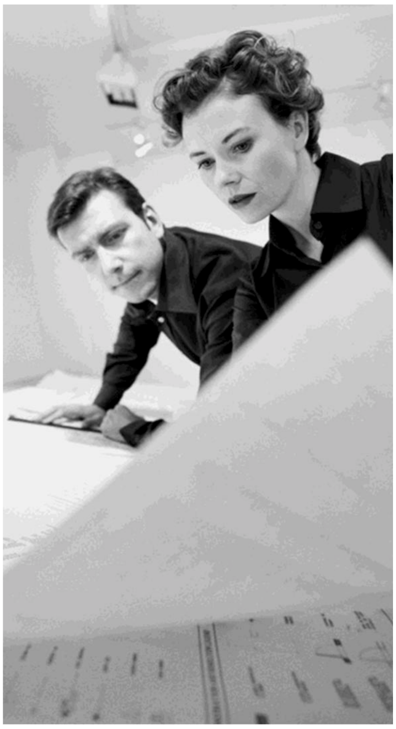

Figure 334: Employee Interaction Center (EIC) Requirements

The Employee Interaction Center allows you to harmonize the above mentioned requirements with your actual business processes. The goal of this is to minimize the effort involved by standardizing and automating processes and their central processing without any subsequent loss of quality.

The following advantages are gained from introducing the EIC:

- Improvement of service quality
- Fast and service-oriented resolution of employee queries supported by solution databases, contact history, and so on.
- Single contact point for various channels of communication such as telephone, email, workflows, incoming ESS/MSS, fax, and post
- Reduction in costs for HR services
- Increased efficiency and cost transparency
- Support of integrated and standardized HR processes, including the agreement of Service Level Agreements
- Bundling and more efficient use of HR resources
- Automation of the processes
- Integration of Employee Self Services and Manager Self Services using the SAP portal

The easy-to-use, interactive interface plays a role in achieving goals quickly

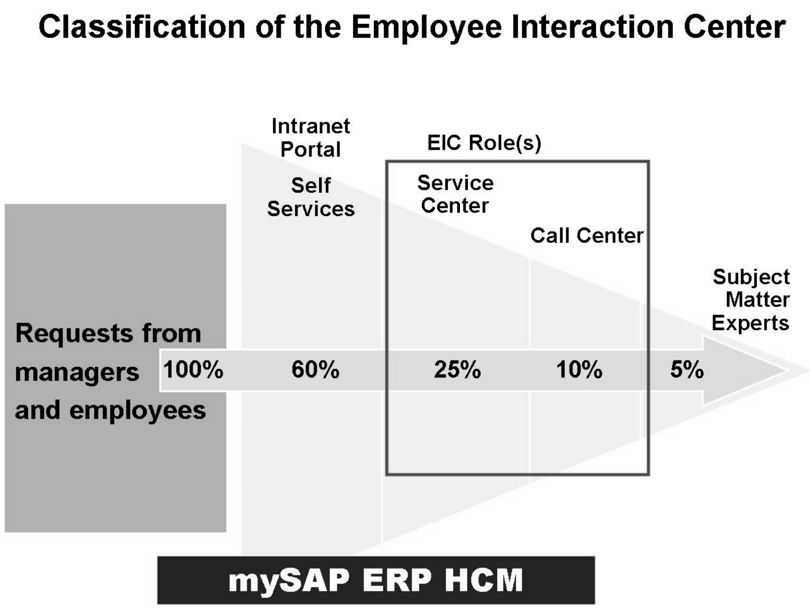

Figure 335: Employee Interaction Center Classification

The aim of integrating an EIC is firstly so that as many tasks as possible can be dealt with by self services. This includes processes such as leave requests, company insurances, and so on.

If this is not possible, perhaps because the employee has further queries, or an activity has to be revised again (for example, travel request), the EIC is used. This can happen, for example for activities such as organizational change, transfer to another country, and so on. In the EIC, the service center represents a first level support that carries out most tasks.

The EIC can continue to process the activity whilst physically separate from the trigger.

Complicated special tasks are forwarded to the advice center (second level support).

Only if the task cannot be dealt with in the EIC do subject matter experts, or HR strategists in the last instance, intervene.

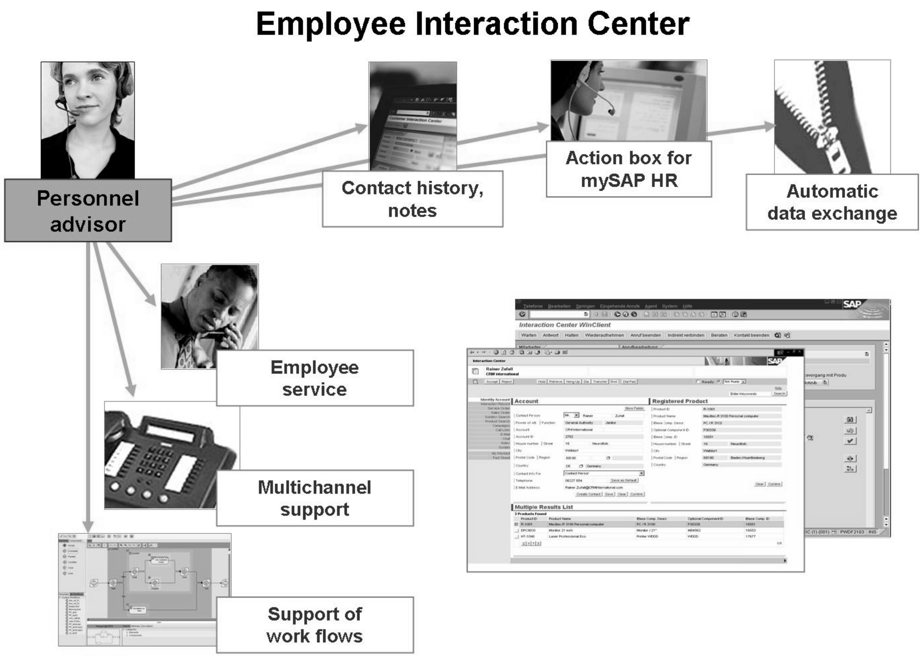

Figure 336: Employee Interaction Center

Employees can contact the EIC in a variety of ways including telephoning directly.

Within the EIS, work flows are supported through the option of forwarding tasks from the service center to the advice center.

The personal advisor can use a contact history to obtain precise information about the employee's previous contacts and issues.

To perform certain tasks, they can use the standard functions of my SAP ERP, such as master data maintenance. For this they go from the EIS to the relevant transactions in HCM and back again. Data is also exchanged from the EIC (mini data master) with data from HCM via ALE in real time or at regular intervals.

Inbound Call – Asset Contact, Description

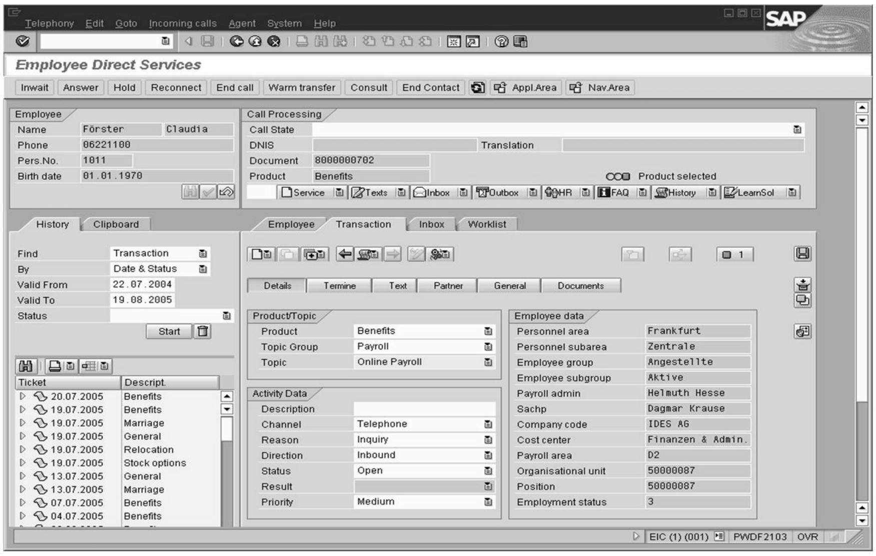

Figure 337: Inbound Call – Asset Contact, Description

The graphic shows a typical screen that is available to the HR advisor in the EIC. After the employee has been selected (above left), historical data about the employee is shown (bottom left).

After this, a new activitiy for example can be recorded (bottom right).

Facilitated Discussion

Discussion Questions

Use the following questions to engage the participants in the discussion. Feel free to use your own additional questions.

Lesson Summary

You should now be able to:

- Describe Employee Interaction Center

Unit Summary

You should now be able to:

- Describe the portal role HR Administrator
- Describe Employee Interaction Center

Unit 21

573

Case Study

For more information, see the Instructor Guide in SAPNet.

Unit Overview

In an exercise at the end of the course, the participant has the chance to assess how much he or she has learnt .

Unit Objectives

After completing this unit, you will be able to:

- Understand better the content of this course by completing the exercises

Unit Contents

Lesson: Case Study

574

Lesson Duration: 60 Minutes

Lesson Overview

The detailed exercise in the case study enables you to put the most important concepts of this course into practice once more.

Lesson Objectives

After completing this lesson, you will be able to:

- Understand better the content of this course by completing the exercises

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Business Example

Different problems occur within your company that you have to solve

Hint: This case study is divided into individual exercises. The individual exercises are self-contained. All exercises are optional, except for the first exercise. If you find that you do not have enough time to complete all the exercises, concentrate on those exercises that are most relevant to your business practice.

You are not provided with a perfect solution to the case study since the aim of the case study is to test your own knowledge. First try to complete the exercises without any additional help. If you have any difficulties, refer to the notes at the end of the relevant exercise. Should you still have difficulties, your instructor is, of course, at your disposal.

Business scenario:

Your company has bought another company. This new subsidiary (located on another site) manufactures and sells mopeds.

Exercise 1: Your company structure has changed through the purchase of this subsidiary: You need to create a new personnel area MP## under the CABB company code. This personnel area should have a similar structure to personnel area PA00, but without its own head office.

Note: For notes on completing this exercise, see the unit on "Enterprise Structure".

Exercise 2: * You need to hire a new employee for your part of the company from the first of this month. Use the hiring action HR305 with the following basic data:

Personnel number: **305995##**

Company code: **CABB**

Personnel area: **MP##**

Personnel subarea: **Production**

EE group: **Active**

EE subgroup: ##

Position: **99999999**

Work schedule rule: **Norm**

Pay scale type: **90**

Pay scale area: **50**

Pay scale group: **E01**

Pay scale level: **01**

Wage type: **M000**

You can make entries of your choice for any data that has not been specified explicitly.

Note: For notes on completing this exercise, see the unit on "Hiring an Employee".

Exercise 3: * Your company has decided to adjust certain default values and selection options especially for the new production plant.

1. In Organizational Management, store the following data in the "## Production" organizational unit for the "## Production Worker B" position as of the first of this month:

   EE group: **Active**

   EE subgroup: ##

   Company code: **CABB**

Personnel area: **MP##**

Personnel subarea: **Production**

Hint: You find the "## Production" organizational unit under the following path: *Training International → Production → ## Production*

For notes on completing this exercise, see the unit on "Organizational Structure".

2. The new production plant should have a new pay scale type. You need to create this new pay scale type. The key of the new pay scale type should be 50 + ##.

   Note: For notes on completing this exercise, see the unit on "Remuneration Structure".

3. In the relevant table (NOT in the feature), enter the following values as default values for an employee in personnel area MP## and personnel subarea Production: 50 + ## for pay scale type and 70 + ## for pay scale area.

   Note: For notes on completing this exercise, see the unit on "Remuneration Structure".

4. In the pay scale table, enter meaningful entries for hourly wage earners between 8 and 20 euro for pay scale type 50 + ## and pay scale area 70 + ##. Use the pay scale group E01 and pay scale levels 01 to 04.

   Note: For notes on completing this exercise, see the unit on "Remuneration Structure".

5. The payroll should be run for all the employees in your new production plant together, separate from all other employees. Create a new payroll area with the key 60 + ##. The payroll should be run monthly.

   Note: For notes on completing this exercise, see the unit on "Additional Organizational Assignment".

6. A new administrator group should be responsible for the employees in the new production plant. Create a new administrator group called MP## and a new administrator M##.

   Note: For notes on completing this exercise, see the unit on "Additional Organizational Assignment".

7. In your new company, you want to record whether an employee is a craftsman or a master craftsman. In the appropriate Customizing table, make the entries Moped Craftsman ## and Moped Master ##.

   Note: For notes on completing this exercise, see the unit on "Additional Organizational Assignment".

8. Set up a new wage type Hourly Wage Moped ## with the ID ##50. You can use wage type MM10 as a template.

   Customize the wage type so that the value is taken from the pay scale table. It should be possible to overwrite the amount, provided the administrator does not enter any amounts under 8 euro or over 25 euro.

9. Set up a new wage type "Hourly Wage Bonus Moped ##" with the key ##60. You can use wage type MM30 as a template.

   Customize the wage type so that the value is calculated from 10% of wage type ##50. The amount in the infotype should be relevant. Round up the wage type to the nearest euro.

   Note: For notes on completing this exercise, see the unit on "Wage Type Structure".

10. Hire another employee with the following basic data as of today using the hiring action HR305:

    Personnel number: **305996##**

    Position: **## Production Worker B** in organizational unit **## Production**

    Work schedule rule: **Norm**

    Pay scale group: **E01**

    Pay scale level: **01**

    Wage type: **##50**

    You can make entries of your choice for any data that has not been specified explicitly.

    Check whether the settings you made in exercise 3 have the expected effect:

    - Is the data for the enterprise or personnel structure pulled from Organizational Management?
    - Are the correct entries for pay scale type and pay scale area defaulted?
    - Can you select payroll area 60 + ##?
    - Can you select the administrator you created from the MP## administrator group?
    - Can you specify whether an employee is a Moped Craftsman ## or a Moped Master ##?

- Is the corresponding entry pulled from the pay scale table when you enter wage type ##50? What is the range in which you can change the amount?
- Is wage type ##60 calculated and rounded as you expected?

Exercise 4: * In your company, you have to check and change, if necessary, the attributes and interfaces of an infotype.

Use the infotype assigned to your group:

Group	Infotype Assignment	Group	Infotype Assignment
00	0007	16	0050
01	0009	17	0031
02	0105	18	0004
03	0022	19	2050
04	0015	20	2051
05	0027	21	2001
06	0002	22	2002
07	0014	23	2003
08	0008	24	2004
09	0017	25	2005
10	0019	26	2006
11	0040	27	2007
12	0041	28	2010

Group	Infotype Assignment	Group	Infotype Assignment
13	0077	29	2012
14	0001	30	2013
15	0016		

1. As there are now a lot of employees working in your company, you would like to see the employee subgroup to which an employee belongs in the header of the relevant infotype. Include this information in the screen header.

   For this, enter the following basic data:

   Your infotype has screen header number ## + 50 and your header modification number is ## + 30.
2. In the bottom screen area, hide a field of your choice and then show it again.
3. Include your infotype on your tab page "My Group ## "(key 50 + ##).
4. Check the effect your settings have by creating a new record of your infotype for an employee of your choice.

   Note: For notes on completing this exercise, see the unit on "Infotypes".

Exercise 5: * You need to create your own action in case the employment percentage in the Planned Working Time infotype (0007) changes. Use the following entry as the ID:

Group Course Partici-pants	Info Group	Action Type	Group Course Partici-pants	Info Group	Action Type
00	B0	F0	16	D6	G6
01	B1	F1	17	D7	G7
02	B2	F2	18	D8	G8
03	B3	F3	19	D9	G9
04	B4	F4	20	F0	H0
05	B5	F5	21	F1	H1
06	B6	F6	22	F2	H2
07	B7	F7	23	F3	H3
08	B8	F8	24	F4	H4
09	B9	F9	25	F5	H5

Group Course Partici-pants	Info Group	Action Type	Group Course Partici-pants	Info Group	Action Type
10	N0	G0	26	F6	H6
11	D1	G1	27	F7	H7
12	D2	G2	28	F8	H8
13	D3	G3	29	F9	H9
14	D4	G4	30	H0	K0
15	D5	G5			

The action should call the Planned Working Time and Basic Pay infotypes in copy mode.

Include the new action in transaction PA40 “Personnel Actions”. The action should only be displayed in your user group (50 + ##).

Run the action once for an employee of your choice.

Note: For notes on completing this exercise, see the unit on “Actions”.

Facilitated Discussion

...

Discussion Questions

Use the following questions to engage the participants in the discussion. Feel free to use your own additional questions.

...

Lesson Summary

You should now be able to:

- Understand better the content of this course by completing the exercises

Unit Summary

You should now be able to:

- Understand better the content of this course by completing the exercises

Unit 22

583 Introduction to SAP Time Management

For more information, see the Instructor Guide in SAPNet.

Unit Overview

This unit provides an overview of Time Management and its integration with other applications.

Unit Objectives

After completing this unit, you will be able to:

- Explain the prerequisites for SAP R/3 Time Management

Unit Contents

Lesson: Introduction to Time Management

584

Lesson Duration: 45 Minutes

Lesson Overview

This lesson provides an overview of HR Time Management and how it is integrated with other applications.

Lesson Objectives

After completing this lesson, you will be able to:

- Explain the prerequisites for SAP R/3 Time Management

For more information, see the Instructor Guide in SAPNet.

Business Example

You want to get an overview of the implementation options in SAP R/3 Time Management.

Introduction to Time Management

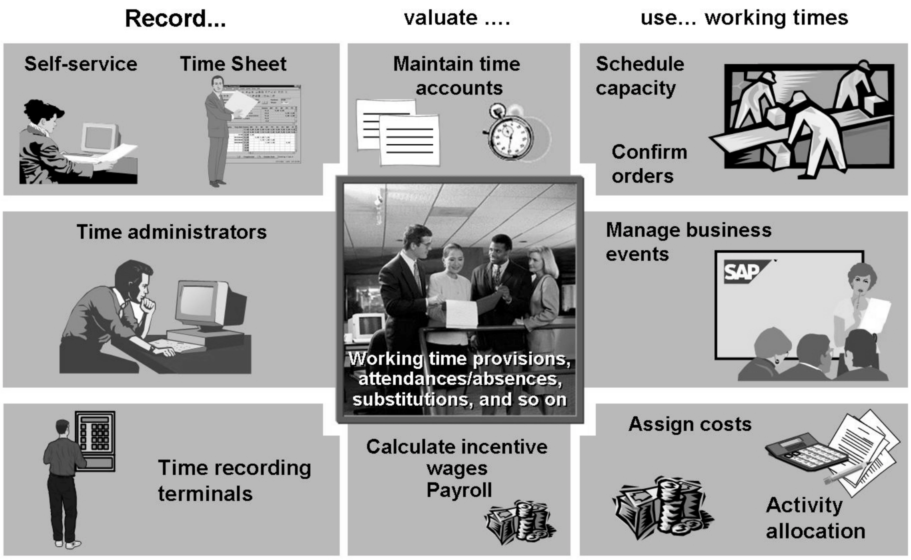


Figure 338: Time Management: An Overview

Information on the work performed by employees and their availability to work are essential elements of a human resources management system. This time data is transferred to other application areas, such as Controlling and Logistics, and is an influential factor in enterprise-wise decision-making.

Time Management provides you with a flexible means of setting up, recording, and evaluating working times.

Information about working times is transferred to Payroll to calculate employees' gross pay.

There are various options for recording working times: Manually entering time data online, using time recording terminals, or employees using self-service applications.

Time accounts (leave, flextime, and so on) can be managed manually or automatically.

Working times can be allocated as activities in Controlling, and the resultant costs can be assigned to the appropriate source.

Time management information is used within logistics to determine employee availability for capacity planning purposes.

Enterprise work requirements can be determined and employee shifts scheduled.

Time tickets can be generated automatically from Plant Data Collection (PDC) postings.

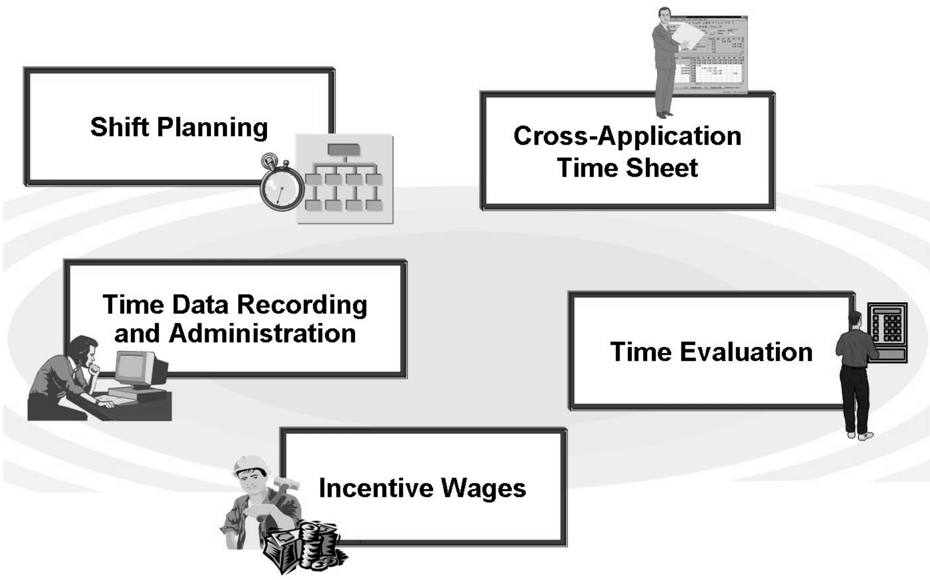


Figure 339: SAP Components for Time Management

The scope of functions available in Time Management can be customized according to the requirements of your enterprise. This ranges from simple administration of leave and illness times to planning personnel capacity, valuating attendance and absence times using time accounts, determining overtime and bonus wage types, and processing incentive wages data (such as piecework, for example). There are various components in Time Management, which you can use individually or together.

Employees can use the **Cross-Application Time Sheet** to enter their own actual times. Time data can be recorded and transferred to Controlling, Human Resources, and Logistics for further processing. Time data can be recorded as attendances, absences, and employee remuneration information for Human Resources.

The **Incentive Wages** component enables you to implement performance-related compensation. In this way, you can set up different types of wages based on time, premiums, or piecework. You can implement incentive wages for individuals or groups. Incentive wages reads employee data from the logistics system, prepares the data according to the type of payment and transfers the data to payroll.

Shift Planning allows you to quickly and efficiently schedule the human resources in your enterprise. In this way, you can assign shift times, locations, type of personnel, and number of required employees to optimally staff your enterprise.

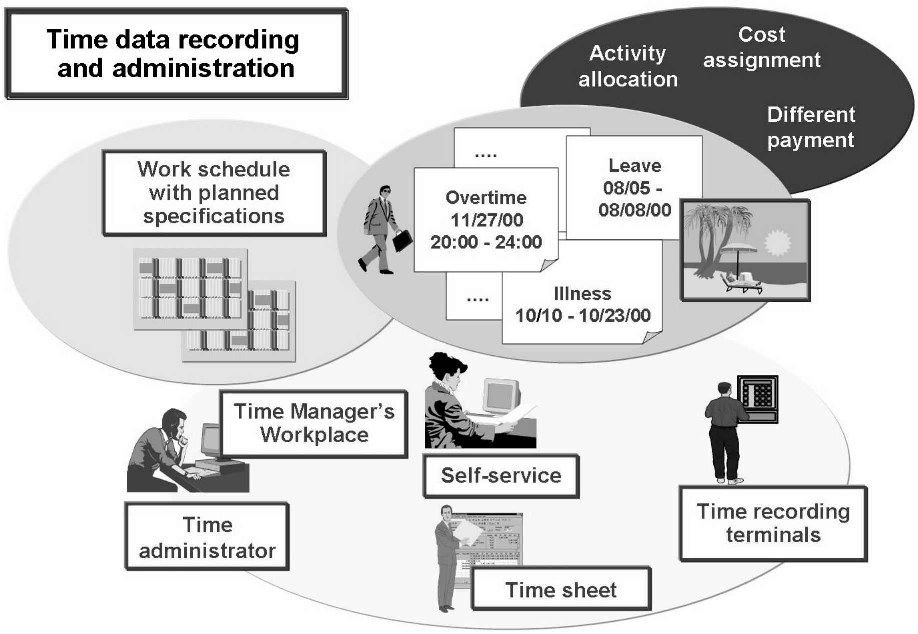


Figure 340: Time Data Recording and Administration

The central element in Time Management is the employee's work schedule. It contains the planned specifications (including breaks), according to which employees are to work.

In addition, time data such as illnesses, leave, and business trips are recorded for employees. Depending on the type of time management in your enterprise, you record only deviations from the employee work schedules or only the complete actual times.

There are various options for recording working times: Manually entering time data online, using time recording terminals, or employees using self-service applications. Time data is processed in the same way, regardless of which recording method is used. Time Management supports centralized data entry by administrators, decentralized time entry by employees in individual departments (such as a supervisor in the production area), or by employees themselves.

Information about different payments can also be entered along with time data.

Working times can be allocated as activities in Controlling, and the costs resulting from working times can be assigned to the appropriate source.

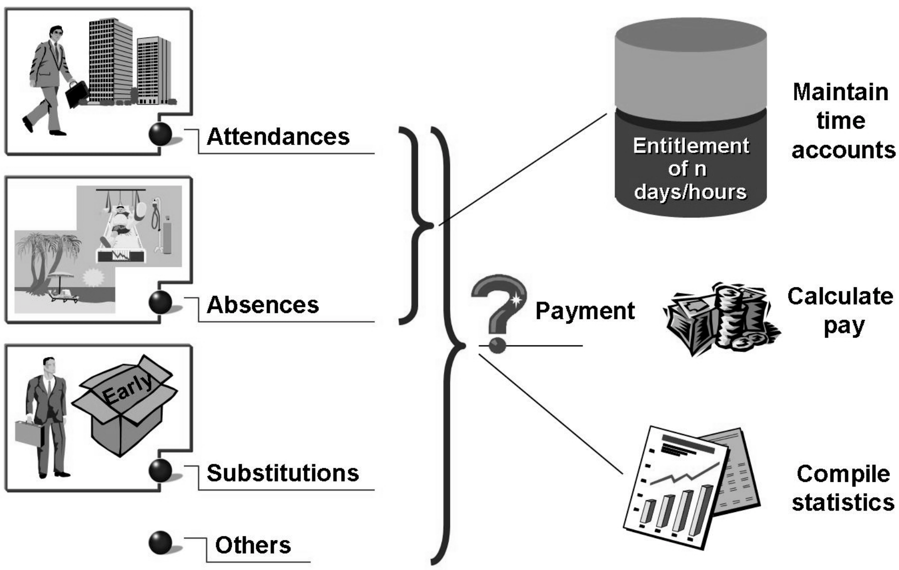


Figure 341: Time Recording Methods (1)

Time data such as changes in planned specifications, attendances (time worked, business trips, or additional training), absences (leave, illness, and so on) is recorded for employees.

You can use this time data to:

Determine the applicable overtime bonuses for overtime worked Compensate for working on Sundays at a different rate than that used for working on normal workdays

Maintain time accounts You may not want to remunerate overtime, but instead have it accrued in a time account (time off from overtime, for example) that is available to the employee. When the employee takes the corresponding time off (= absence), then this amount is deducted from the time off in lieu of overtime account.

Compile statistics. Evaluations of overtime levels or illness-related absences in individual departments can be created.

Specifications for different payment or account assignment information can also be entered along with time data. Certain time data (attendances, absences, employee remuneration info) can also be recorded for internal activity allocation purposes. This additional information is evaluated in Payroll and Controlling.

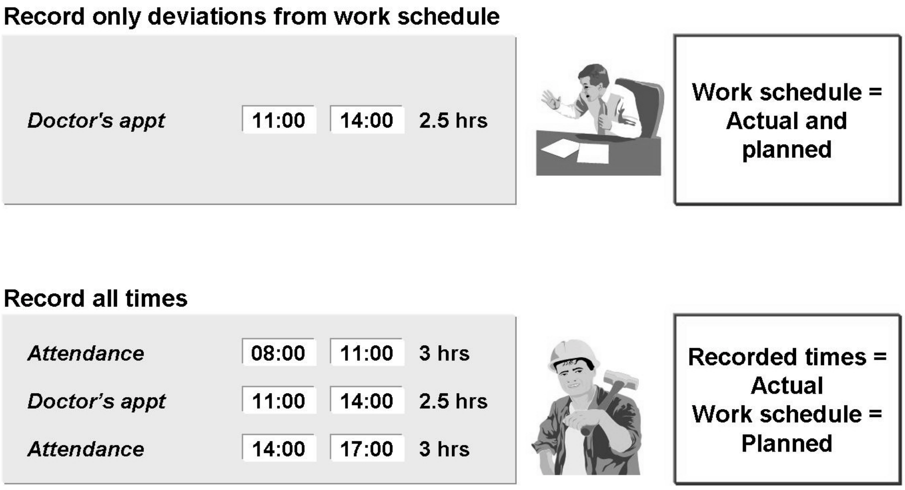


Figure 342: Time Recording Methods (2)

There are two different methods for transferring employee time data to the SAP R/3 System.

1. Recording only deviations from the work schedule

Only time data that represents an exception to the employee's work schedule is recorded. You can include the most current data, such as employee illnesses, schedule and record substitutions, and enter annual leave for employees.

2. Recording actual times

This method records all actual times, that is, all transactions such as actual working times, absences, and so on.

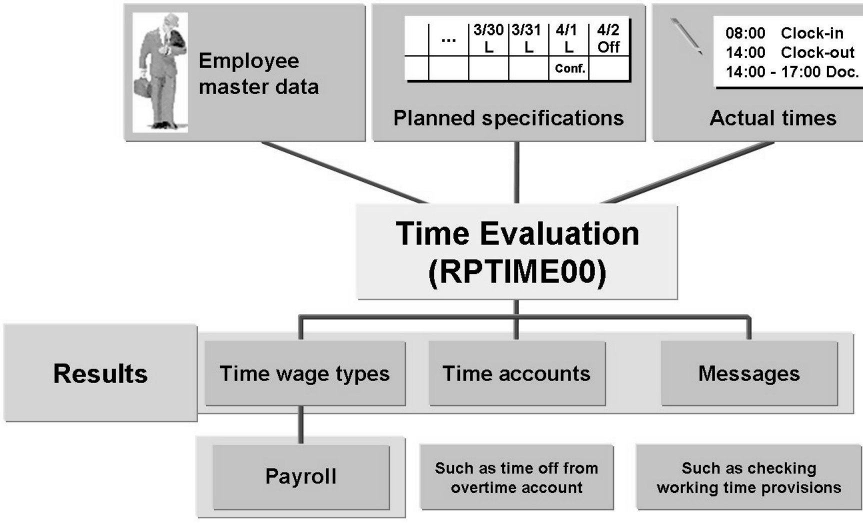


Figure 343: Time Evaluation

Employees' time data is valuated in time evaluation. Time evaluation determines planned working times and overtime, manages time accounts (flextime balances, overtime, productive hours, and so on), creates wage types (for overtime or bonus wage types, for example), updates time quotas, and checks working time provisions (such as core time violations). The time wage types created during time evaluation are valuated in Payroll.

Time evaluation is carried out by a time evaluation driver called RPTIME00. The steps to be carried out by RPTIME00 are specified in a personnel calculation schema.

The standard system contains several personnel calculation schemas that cover various requirements and strategies for evaluating data. Schemas are available for, amongst other things:

Time management that records all actual working times of employees, in addition to deviations to the work schedule.

Time management that only records the deviations to the work schedule

The processing of time data for which only the work duration, not the start and end times, are recorded

The processing rules for time evaluation can be modified to suit the specific requirements of your enterprise.

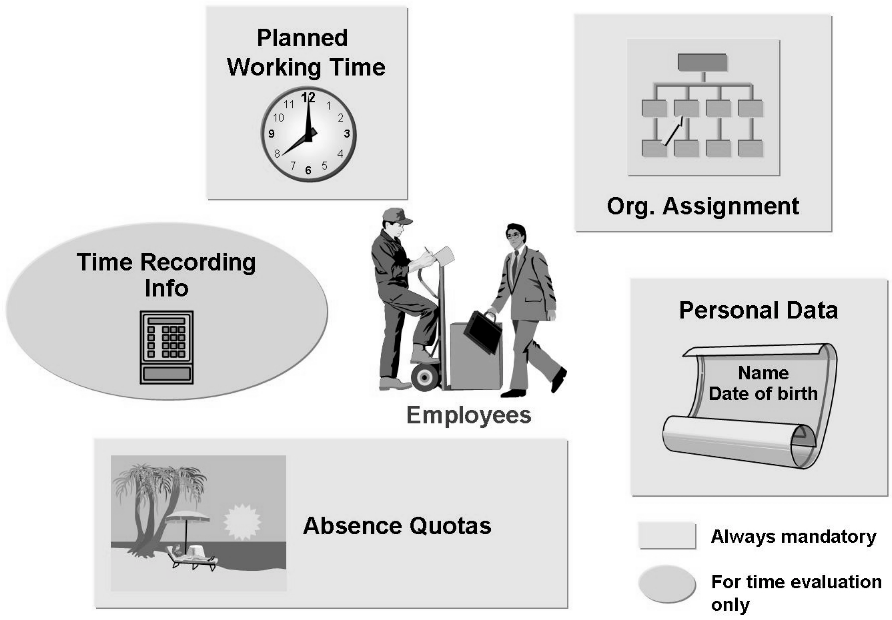


Figure 344: Required Infotypes in Time Management

In Time Management, certain master data infotype records must be available for each employee. Time management data is stored in the same master data records used in other human resources areas such as Payroll and Personnel Administration.

The following infotypes are required for the integration of time management master data records:

Organizational Assignment (0001)

Personal Data (0002)

Planned Working Time (0007):

The appropriate Time Management status must be stored in this infotype. It determines whether and how employee time data is to be processed in Time Evaluation or Payroll.

Time Recording Information (0050):

This infotype is used only if time evaluation is used. It can contain interface data for the subsystem and additional employee information for the purposes of time evaluation.

Absence Quotas (2006) to manage leave

Note: The *Payroll Status* infotype (0003), which the system usually creates when an employee is hired, determines the earliest recalculation date and when time evaluation is to be run next.

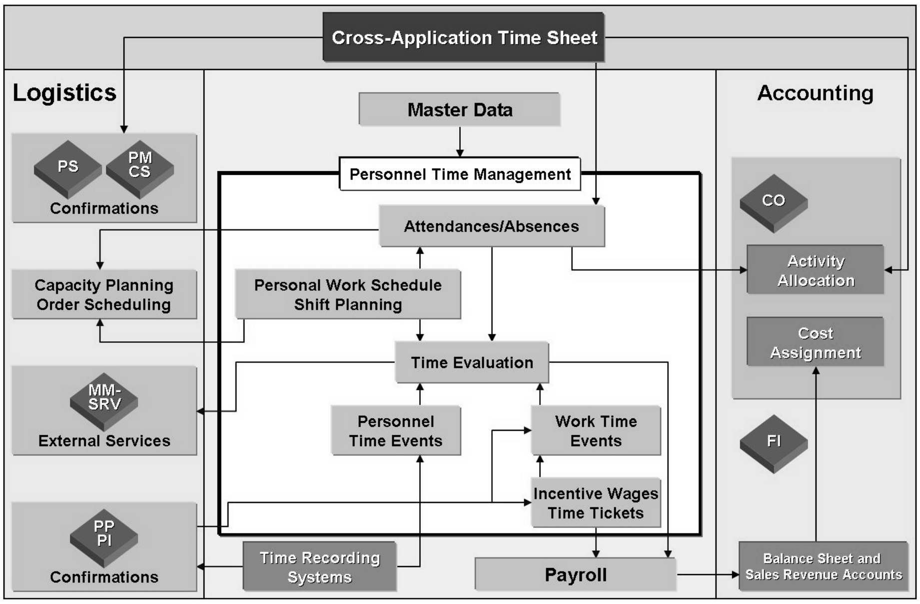


Figure 345: Integration with Other Components

This diagram shows an overview of the entire Time Management process.

Time Management is directly and indirectly linked with various components, both within Human Resources and with other applications.

Examples:

1. Working times entered in the Cross-Application Time Sheet are transferred as attendances to Time Management and as confirmations to Logistics. Attendances are transferred to Time Evaluation for further processing. Time balances and time types are formed, which are then transferred to payroll. Finally, the results are transferred to payroll. The payroll results are transferred to Accounting. In Accounting, the master cost center of the employees is debited according to the information from the confirmation.

2. Employee attendances and absences serve as information about employees' availability for capacity planning in Logistics.

3. Working times recorded in time recording systems are transferred as personnel time events to Time Management and are processed in Time Evaluation. Wage types formed are transferred to Payroll.

Facilitated Discussion

Discussion Questions

Use the following questions to engage the participants in the discussion. Feel free to use your own additional questions.

Lesson Summary

You should now be able to:

- Explain the prerequisites for SAP R/3 Time Management

Unit Summary

You should now be able to:

- Explain the prerequisites for SAP R/3 Time Management

595

Test Your Knowledge

1. In SAP Time Recording it is possible to choose whether to record all times or just the deviations from the work schedule.

   Determine whether this statement is true or false.

   □ True

   □ False

596

Answers

1. In SAP Time Recording it is possible to choose whether to record all times or just the deviations from the work schedule.

   Answer: True

   SAP supports both recording of all actual times and recording of only the deviations from the work schedule.

Unit 23

597 Overview of Time Recording

For more information, see the Instructor Guide in SAPNet.

Unit Overview

This unit provides an introduction to the time management roles and describes the various options for recording time data.

Unit Objectives

After completing this unit, you will be able to:

- Describe the roles in Time Management
- Name the various options for time recording

Unit Contents

Lesson: Roles in Time Management

598

Lesson Duration: 20 Minutes

Lesson Overview

In this lesson, you learn about the roles in Time Management.

Lesson Objectives

After completing this lesson, you will be able to:

- Describe the roles in Time Management

For more information, see the Instructor Guide in SAPNet.

Business Example

Employees at your enterprise work according to the times specified in their work schedules. However, deviations can occur. Employees call in sick, go on vacations, fill in for other employees, work overtime, and so on.

The recording of time data is decentralized at your company:

- People such as team leads, supervisors, and secretaries in individual departments are responsible for correctly entering and maintaining the time data for the employees in their departments.
- Employees enter some time data (such as leave requests) themselves.

HR administrators in the corporate HR department are responsible for entering any additional payroll-relevant data for employees, when necessary.

Roles in Time Management

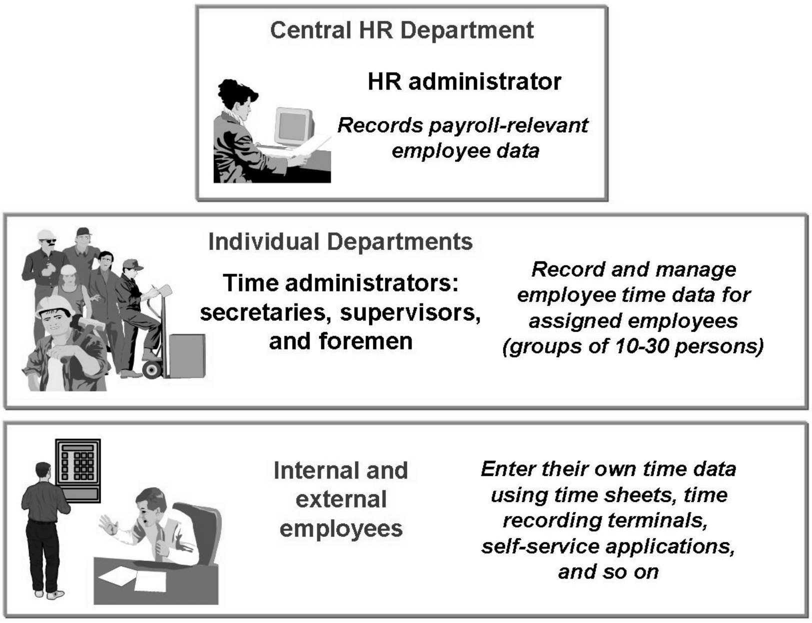


Figure 346: Who Records Time Data?

Entering, maintaining, and evaluating employee time data is often decentralized, that is, the time data is processed in individual departments, not centrally in the HR department.

The main characteristic of decentralized time management is the delegation of time-management tasks to individual departments. Persons who carry out time-management tasks in the departments are usually responsible for small- to medium-sized groups of 10 to 30 employees.

Another aspect of decentralization is the inclusion of employees themselves. For example, employees record their own working times using self-service applications and access information on their work schedules, time accounts, and so on.

HR administrators in the central HR department are responsible for entering any additional payroll-relevant data for employees, when necessary. This data is usually of a sensitive pay-related or administrative nature, such as specifications for continued pay in the event of illness.

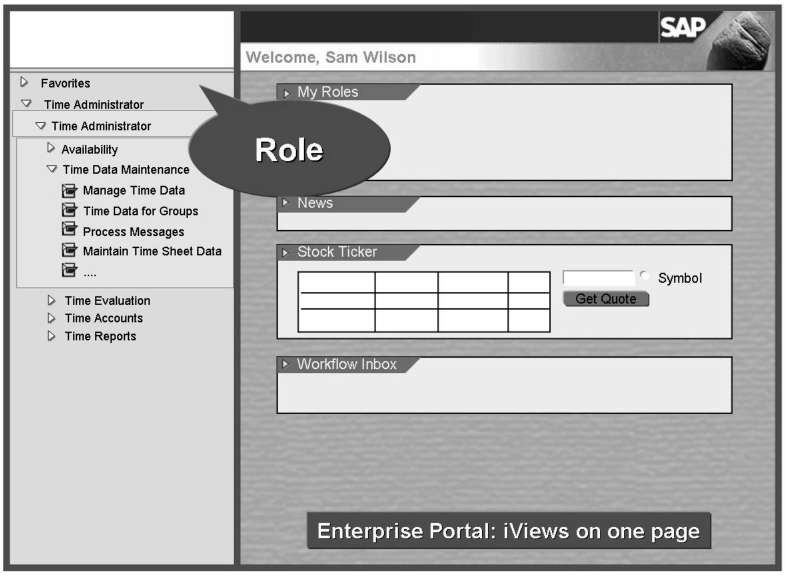


Figure 347: Roles in SAP R/3 or the Enterprise Portal

The Enterprise Portal (EP) is a portal for employees or managers from which they have access to their role-specific user menus and iViews defined for them. If you do not use the Enterprise Portal, you can set up your user roles in the SAP R/3 System. Your role-specific menu is then displayed if you choose the user menu instead of the SAP Easy Access Menu.

From a business perspective, **roles** correspond to certain tasks and functions that employees carry out in an enterprise. From a a technological point of view, roles are simply a collection of specific menus and functions required to perform these tasks. Users access the transactions, reports, and Web-based applications contained in the roles from user menus. User menus contain only the functions required for completing the typical daily tasks of specific users. A role also contains the necessary access authorizations. You can assign as many users to a role as you require.

Composite roles contain several single roles. For example, the composite role "HR Controller" consists of the single role "Employee Time and Labor Controller," in addition to other single roles.

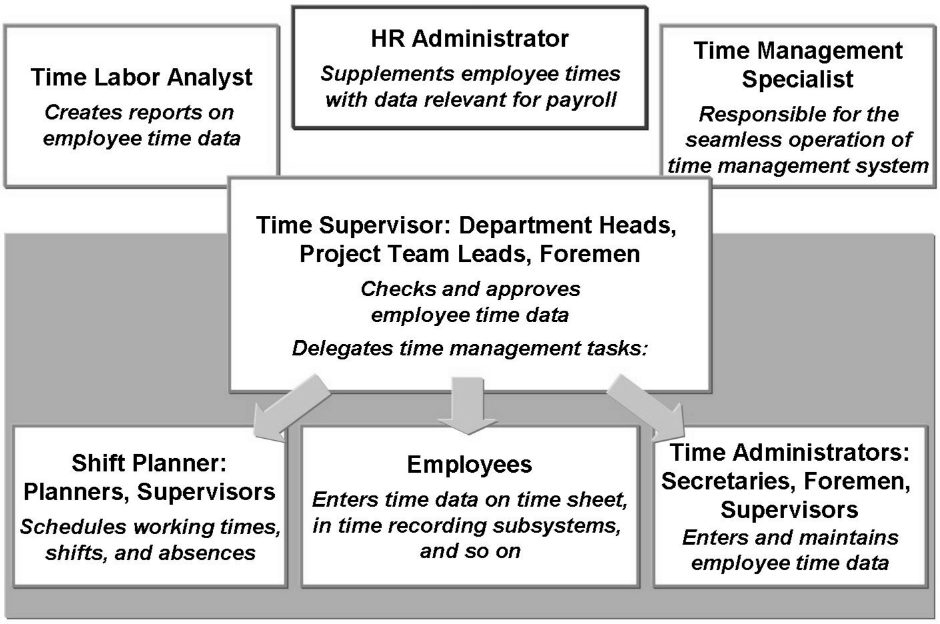


Figure 348: Overview of Roles in Time Management

The figure above displays an overview of the single roles in Time Management.

The **Time and Labor Analyst** monitors employee time and labor data in relation to strategic company goals. He or she creates reports detailing the work levels of all departments or employee groups and overtime levels, for example. The single role **Time and Labor Analyst** (SAP_HR_PT_TIME-LABOR-ANALYST) is assigned to the composite role **HR Analyst** (SAP_WP_HR-ANALYST).

The **Time Management Specialist** is responsible for the seamless operation of the time management system. He or she is concerned with the technical side of the SAP R/3 System. The Time Management Specialist tasks include making recurring settings, maintaining interfaces to other systems and SAP applications, and, when required, modifying or adding to HR-specific Customizing. The single role **Time Management Specialist** (SAP_HR_PT_TIME-MGMT-SPECIALIST) is contained in the composite role **HR Systems Specialist** (SAP_WP_HR-SYSTEM-SPEC).

The **Shift Planner** role is carried out by employees in individual departments in an enterprise, for example, by supervisors and department heads. Shift Planners schedule working times, shifts, or known absences for the employees assigned to them. They take account of employee qualifications, working time preferences, legal regulations, company policies, and cost aspects during planning. The composite role **Shift Planner** (SAP_WP_SHIFT-PLANNER) contains the single role **Shift Planner** (SAP_HR_PT_SHIFT-PLANNER).

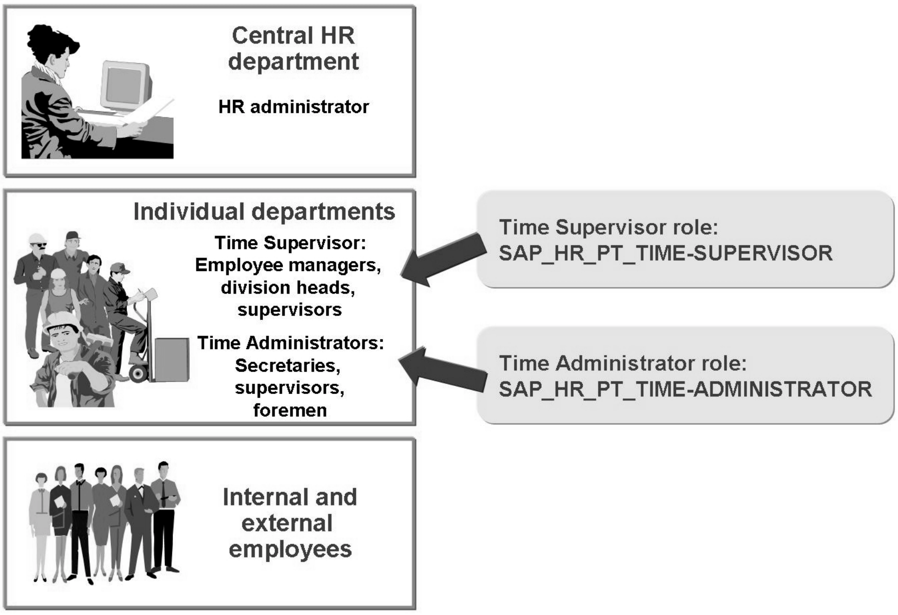


Figure 349: Important Roles in Time Recording

Important roles for decentralized time management are the roles of Time Supervisor and Time Administrator. These roles can also be carried out by the same person.

The **Time Supervisor** is responsible for planning and administrating employee time and labor. Time Supervisors delegate certain time management tasks to employees in their departments (such as to Time Administrators). The Time Supervisor role is carried out by senior employees in individual departments in an enterprise, such as managers, department heads, or foremen. The single role **Time Supervisor** (SAP_HR_PT_TIME-SUPERVISOR) is contained in the composite role **Manager Generic** (SAP_WP_MANAGER).

Time Administrators are responsible for correctly recording and maintaining the time data of employees assigned to them, in addition to their other job tasks. The role of Time Administrator comprises checking employee availability, entering changes in working time, absences, attendances, and bonuses, including information required for posting or payment. The composite role **Time Administrator** (SAP_WP_TIME-ADMINISTRATOR) contains the single role **Time Administrator** (SAP_HR_PT_TIME-ADMINISTRATOR).

Employees can use the Internet or intranet to enter or display their own time data, thus relieving the corporate HR department and departmental time administrators of these tasks.

Facilitated Discussion

Discussion Questions

Use the following questions to engage the participants in the discussion. Feel free to use your own additional questions.

Lesson Summary

You should now be able to:

- Describe the roles in Time Management

Lesson: Time Recording Options

604

Lesson Duration: 35 Minutes

Lesson Overview

This lesson provides an overview of the options for time data recording.

Lesson Objectives

After completing this lesson, you will be able to:

- Name the various options for time recording

For more information, see the Instructor Guide in SAPNet.

Business Example

Employees at your enterprise work according to the times specified in their work schedules. However, deviations can occur. Employees call in sick, go on vacations, fill in for other employees, work overtime, and so on.

The recording of time data is decentralized at your company:

- People such as team leads, supervisors, and secretaries in individual departments are responsible for correctly entering and maintaining the time data for the employees in their departments.
- Employees enter some time data (such as leave requests) themselves.

HR administrators in the corporate HR department are responsible for entering any additional payroll-relevant data for employees, when necessary.

General Data Entry Options

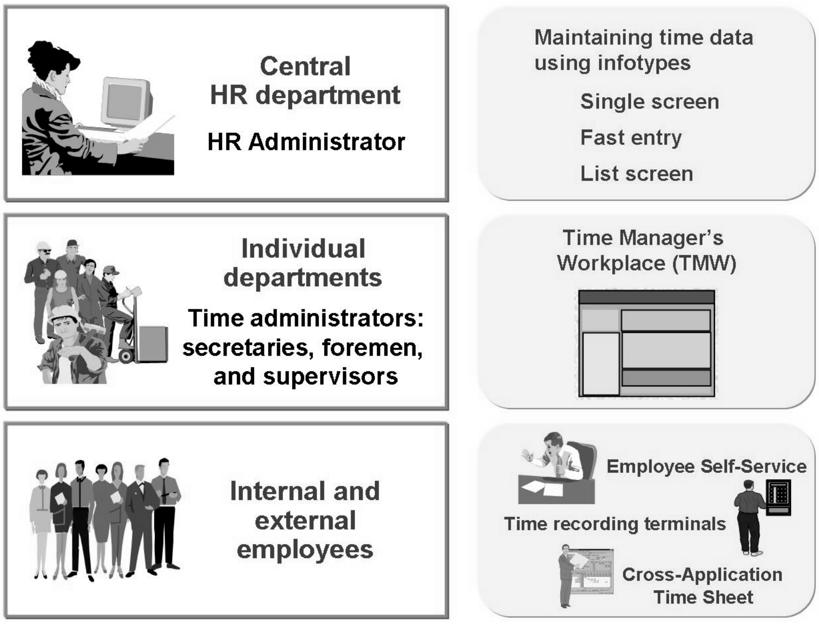


Figure 350: Time Recording Options

In decentralized time management, administrators in the central HR department only have to supplement the employee time and labor data with payment-related or other administrative information. These HR administrators use the functions provided in **Infotype Maintenance** for single screen, list screen, and fast entry since they correspond in principle to the infotype maintenance in personnel administration.

The **Time Manager's Workplace** (TMW) was developed for the needs of decentrally-organized time administrators. The TMW is a user-friendly interface that streamlines recording and maintaining time data and processing messages.

The following options are available to employees for recording or displaying their own personal data:

Front-end time recording terminals

Employee self-service applications in the Internet or intranet

The Cross-Application Time Sheet

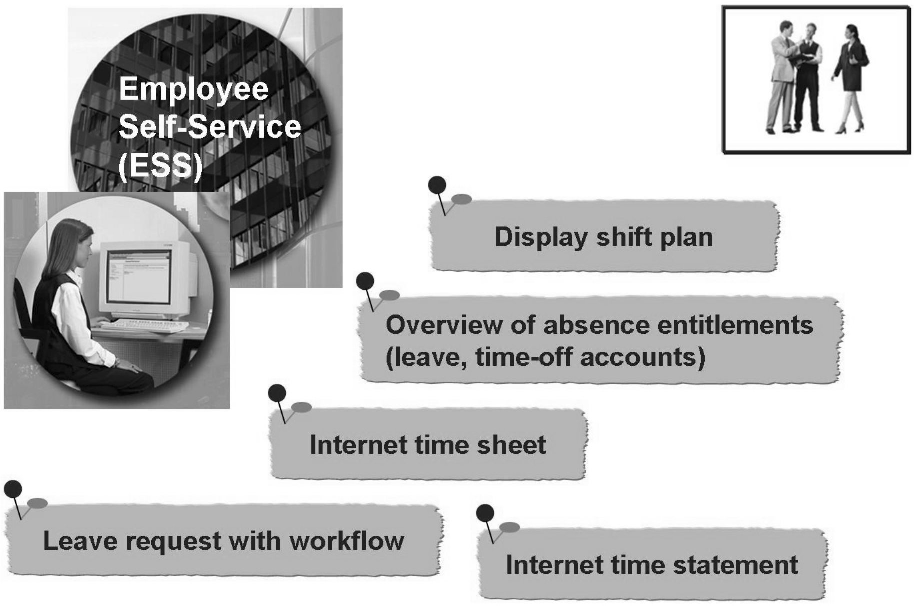


Figure 351: Employee Self-Services in Time Management

The following Internet Application Components (IACs) for time management are also available for employees to display and maintain their own data:

Display Personal Work Schedule

Display Time Accounts (absence entitlements):

Employees can find out information about their past, current, or future absence entitlements.

Internet Time Statement:

If you evaluate employee data using time evaluation, employees can use the time statement to get an overview of the day- and period-based balances and wage types determined for them during time evaluation. Employees can also display and print their time statement on the Internet.

Internet Time Sheet:

This service enables employees to enter their own working times in a time sheet from the Internet or company intranet.

Leave Request with Workflow:

This service allows employees to submit a leave request or inform their supervisor that they need to be absent for a particular period of time (such as for illness). A workflow is triggered when an employee creates an leave request whereby the request is automatically sent to the Internet/intranet inbox of that employee's manager. The employee's manager can approve or reject the leave request.

- **The Enterprise Portal contains a range of iViews for displaying and maintaining time data:**

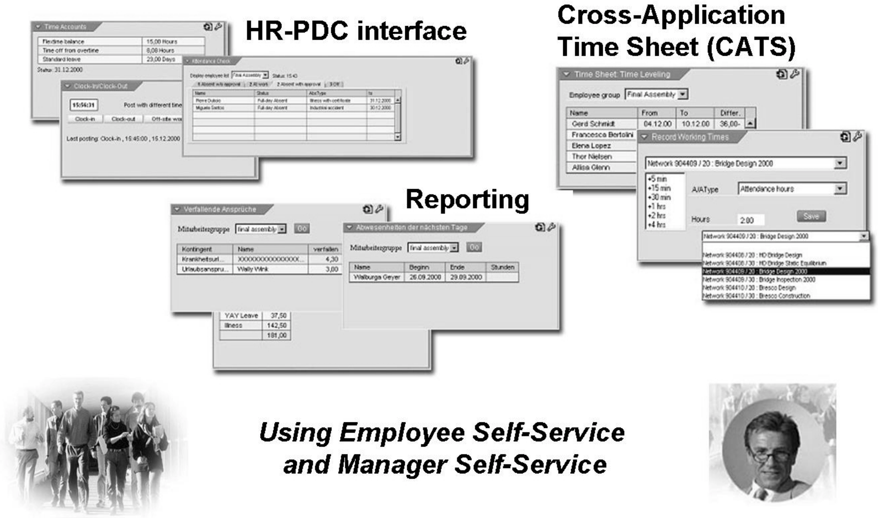


Figure 352: Enterprise Portal: iViews for Time Management

You can query and maintain time management data directly using the employee portal (employee self-service) or the manager portal (manager self-service).

The system accesses the HR_PDC interfaces or the Cross-Application Time Sheet (CATS) for time data maintenance in the background.

iViews are simple, self-contained applications that are displayed on a page in the Enterprise Portal. The slide shows various time management examples from the range of iViews available in the Enterprise Portal.

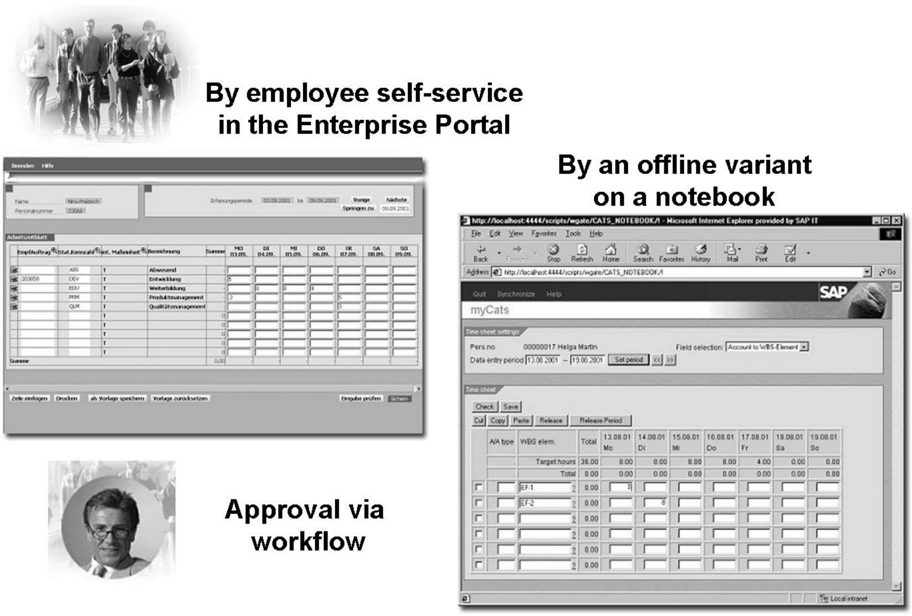


Figure 353: CATS: Other Data Entry Options

An Internet version of the Cross-Application Time Sheet is available for employees. It can be accessed and maintained via Employee Self-Service (ESS) in the browser.

"CATS" notebook is the name of the offline variant that can be installed locally on a laptop. This enables data to be entered even when there is no connection to the SAP R/3 System; it can subsequently be synchronized with the system. This user interface is available with SAP R/3 4.6C and above. For more information, see SAP Note 497017.

The data can, of course, still be maintained directly in the SAP R/3 System.

For more information, see www.service.sap.com/hr or www.help.sap.com.

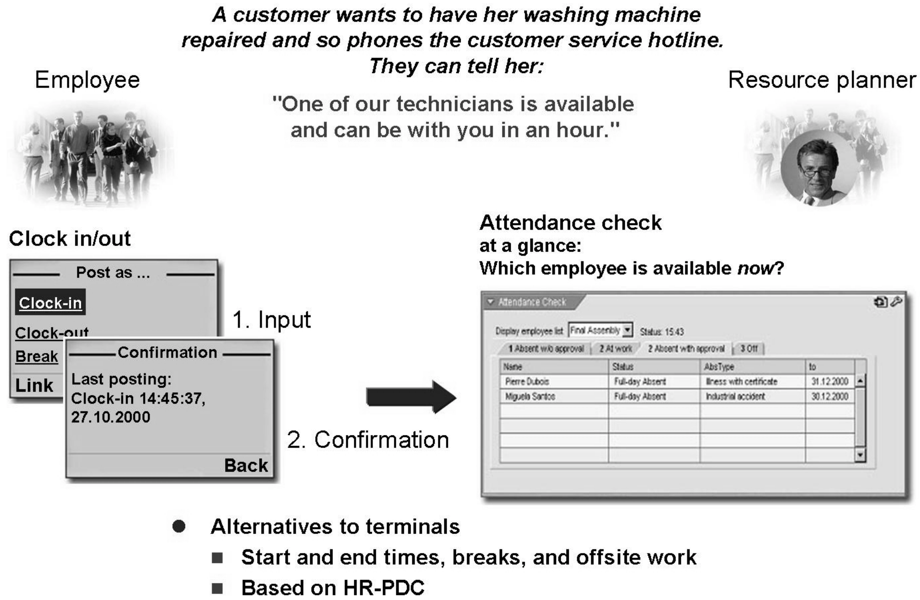


Figure 354: Clock In/Out Using WAP

A new CATS function is the ability to post time events and time data using a WAP-enabled mobile device.

WAP stands for "Wireless Application Protocol" and is the protocol layer for data transfer via mobile devices such as cellular phones.

The connection to the SAP R/3 System is provided by the usual interface for time events, HR_PDC.

The posting is processed in the R/3 System and can then be displayed using an ESS scenario, for example.

WAP signifies:

Business processes tailored to employees' needs

Focus on a minimum of information

Optimized default values

Minimized user input

Minimal screen switches

PIN (security)

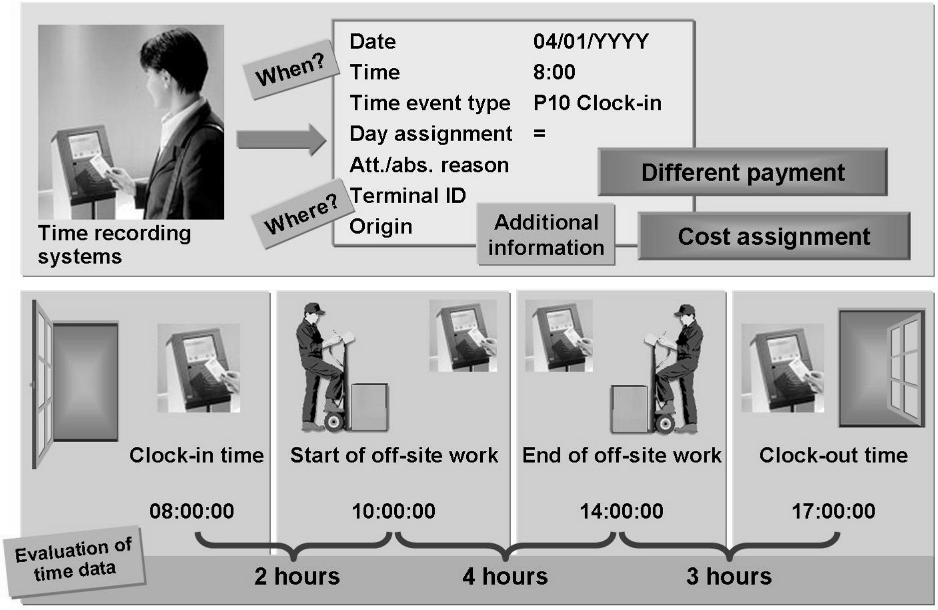


Figure 355: Time Recording Systems (1)

Employees can record time events (such as clock-in or clock-out postings) at external time recording terminals. Additional information on cost assignment and different payment can also be entered.

Time events have to be uploaded to the SAP R/3 System. Similarly, certain data from the SAP R/3 System must be available at the time recording terminals. Communication between time recording systems and HR Time Management takes place via a standardized interface called **Plant Data Collection: Time & Attendance and Employee Expenditures (HR-PDC)**. Using this standardized interface, you can upload time events and employee expenditures recorded by external recording systems to SAP R/3 Time Management. In the same way, master data, control data, and transaction data (such as employee balances) are downloaded to the recording system.

Time events processed in Logistics during a plant data collection can also be uploaded to the SAP R/3 System via standardized interfaces. This data can also be transferred from individual Logistics components to Human Resources, if required.

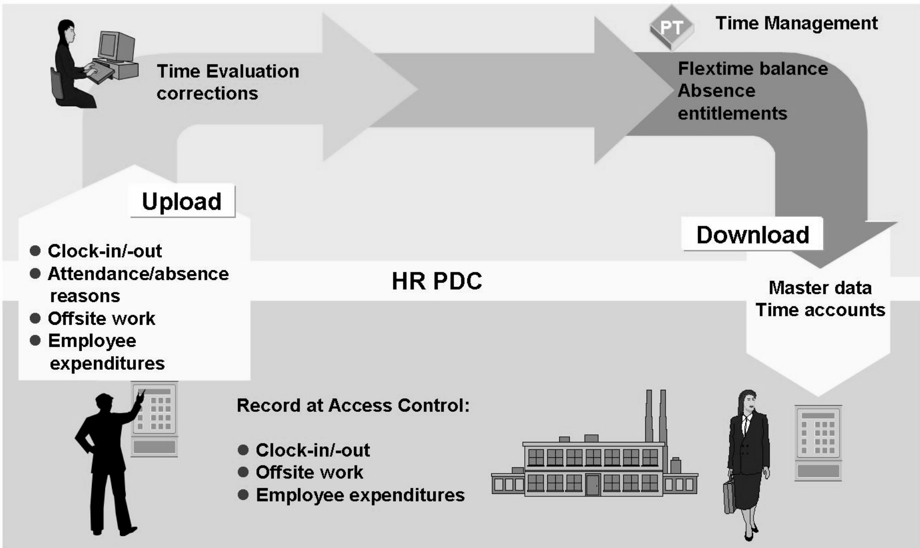


Figure 356: Time Recording Systems (2)

Upload:

Time events are uploaded to the SAP R/3 System (after an upload request). Data can be uploaded several times daily. The data is stored in the CC1TEV table in the SAP R/3 System. The data in the CC1TEV table is read during a subsequent posting of time events, and then stored as time events in the TEVEN table.

Download:

The download supplies the time recording system with data from the SAP R/3 System. Master data from the applications (such as HR master data) and control data (such as attendance and absence reasons, time event types) are supplied to the time recording system to be used for validation purposes. Because the time recording system is supplied with transaction data (time accounts), employees can then display their time account balances at terminals.

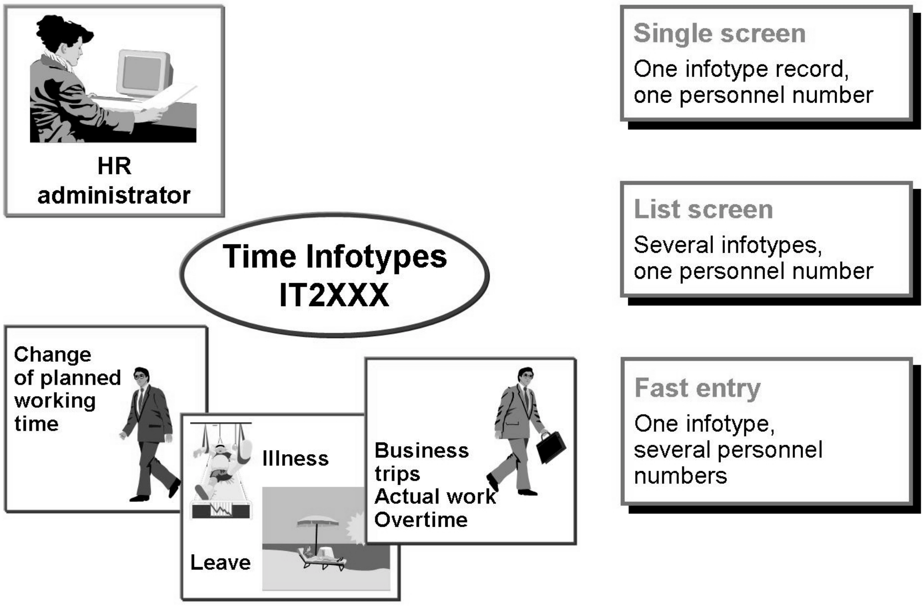


Figure 357: Maintaining Time Data Using Infotypes

You can also maintain and display time data using time infotypes. The following options are available for recording time data using infotypes:

Single screen: Records one infotype for one employee

Fast entry: Records one infotype for several employees

List screen: Records several records of one infotype for one employee

Time infotypes are also subdivided into subtypes. For example, various forms of absences or absence types (such as illness with certificate, illness without certificate, leave, and so on) are recorded using subtypes of the *Absences* infotype (2001).

The Object Manager is available when you maintain time data (in transaction PA61) and display time data (transaction PA51), which you can use to search for employees for whom you want to display or process data. The Object Manager is divided into a search area and a selection area. Using search tools, you can search for objects to be displayed in the selection area.

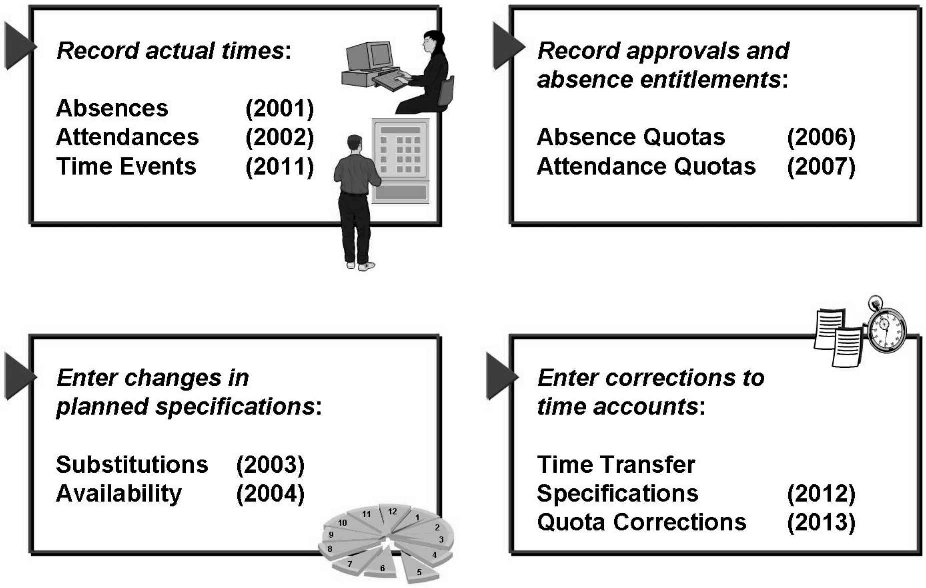


Figure 358: Overview of Time Infotypes

The figure shows an overview of the time infotypes.

The time infotypes *Time Events (2011), Time Transfer Specifications (2012)* and *Quota Corrections* (2013) are only relevant for time evaluation.

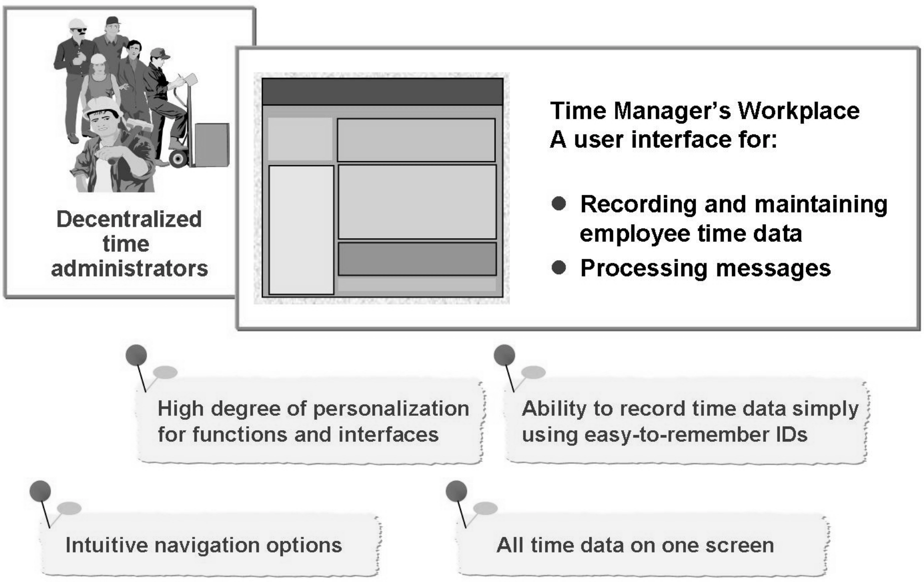


Figure 359: Time Manager's Workplace

The role of a decentralized time administrator is usually fulfilled by supervisors, foremen, administrative assistants, or secretaries in individual departments on site. These groups of employees maintain time data for a manageable number of other employees, in addition to their usual tasks.

For this reason, the *Time Manager's Workplace* (TMW) is easy to learn and extremely user-friendly.

Some advantages of using the TMW are:

All time data can be entered, corrected, or supplemented on one screen

Intuitive navigation options

Time data is recorded using easily recognizable time data IDs

Time administrators can toggle between different views (multi-day, multi-person, one-day, and team view) to maintain time data.

The Time Manager's Workplace can be personalized, that is, you can customize the TMW to suit each user's tasks, with the applicable functions available.

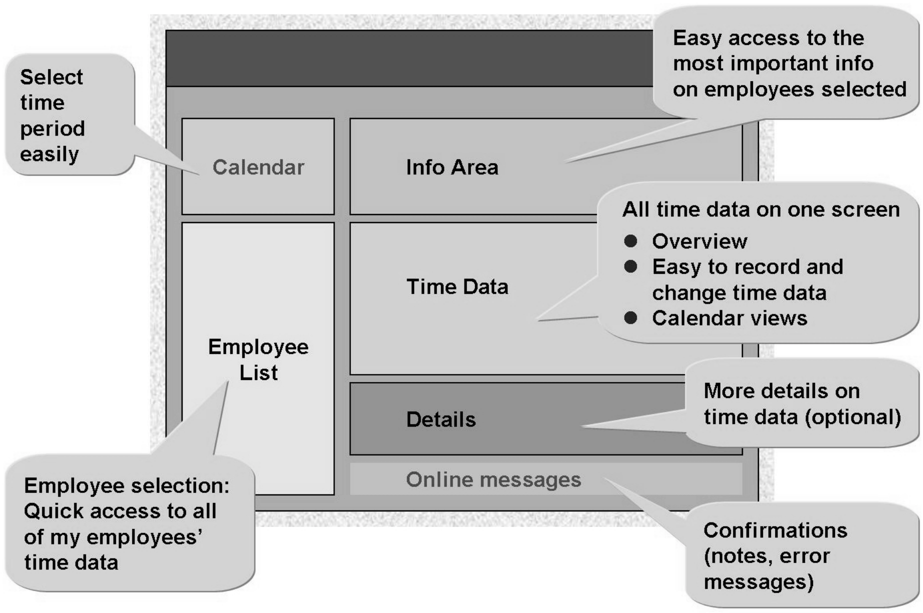


Figure 360: Layout and Screen Areas of the TMW

The *Time Data Maintenance* and *Message Processing* tasks are delivered in the Time Manager's Workplace in the standard system. The layout of screen areas is displayed in the figure above for the Time Data Maintenance task. The layout is similar for the Message Processing task.

The Calendar is used to select the time period for which time data is to be entered.

The Employee List contains the employees assigned to the time administrator. Time administrators can select the employee or employees from this list for whom they want to enter or change time data.

They can display additional information for any selected employee in the Info Area (such as details on master data or time accounts).

In the Time Data screen area, you enter and maitain time data using intuitive time data IDs (such as "I" for illness or "L" for leave).

Any additional specification for the time data can be entered in the Details area (such as activity allocation specfications for an attendance), if required. Information on time data recorded is also visible in the Details area (person who entered the data, date on which data was entered, and so on).

The Messages area contains any messages or confirmations concerning time data entered by the time administrators. These messages can be informational, warning, or error messages.

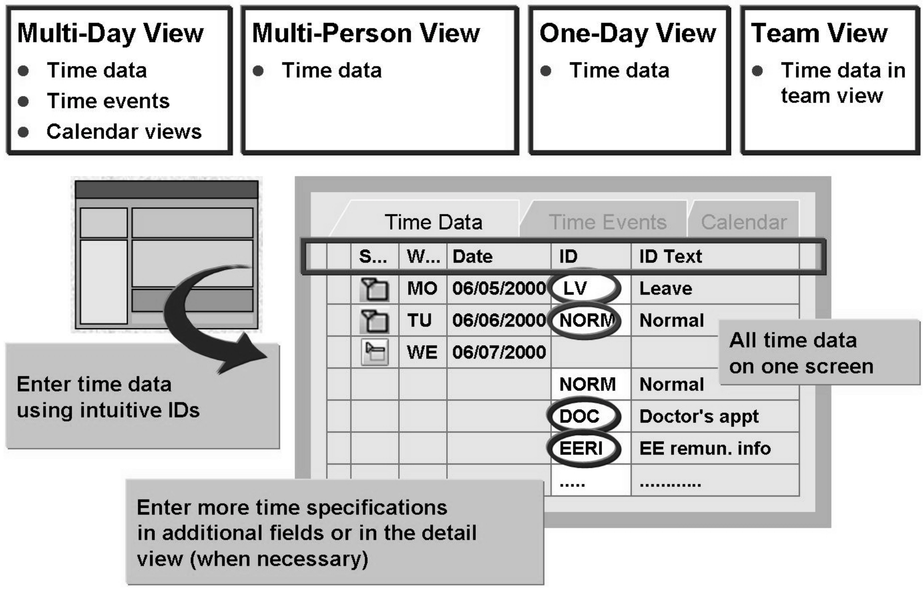


Figure 361: Recording Time Data

The Time Data area enables time administrators to maintain all time data for their employees without having to switch to different screens. They can choose from various views (multi-day, multi-person, and one-day view).

In the Time Events tab, time administrators can maintain and add to employees' time events. This tab is only available in the Multi-Day View. From the Time Data tab, which is available in all of the views, you can enter and maintain all other types of time data (such as attendances and absences, changes in planned specifications, and so on).

New **calendar views and a team view** are available as of R/3 Enterprise.

Time data is entered using intuitive time data IDs. This significantly reduces the administrative workload of time administrators. For example, you could enter "ILL" to create an illness record.

Time data can be supplemented by information entered in additional fields in the Time Data or Details areas.

In the Time Data area, dominants are used to represent the most important information that applies to each day. The focus is on the employee's availability. If you collapse the time data for a specific day, only the dominant information for that day is displayed.

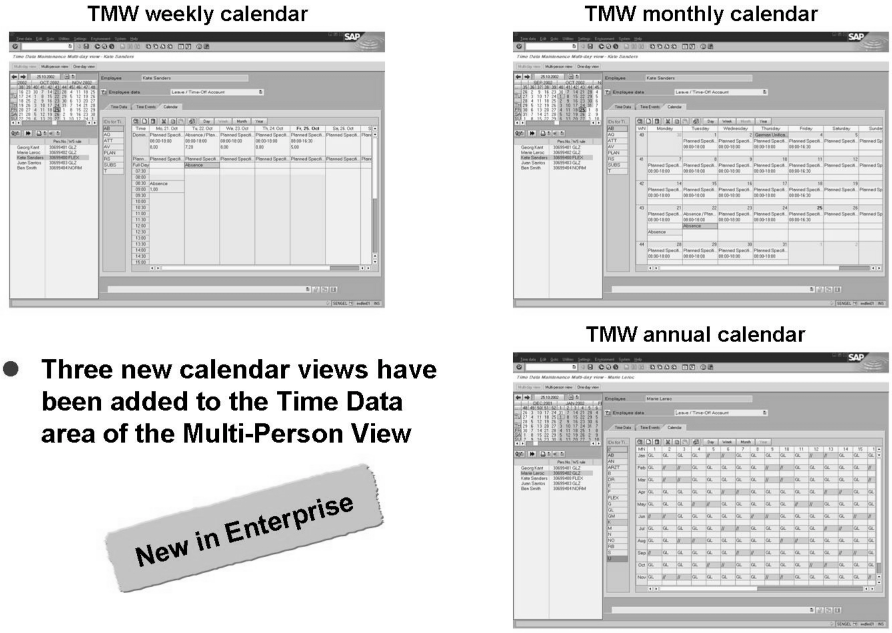


Figure 362: TMW calendar views

The calendar view is new in the time data maintenance area of the TMW. It provides a graphical overview of a person's time data (time entries and time events). A daily, weekly, monthly, and annual calendar are available, which enables you to gain a quick overview of a specific period.

The use of colors for the time data IDs enables you to quickly differentiate different types of time data.

You can also maintain data in this view. The color-coded time data IDs are displayed in a bar to the left of the calendar. You can drag and drop them to the required days. If required, you can copy and paste the calendar entries, such as recurring attendances or absences.

Because they work in a similar way to well-known PC applications (such as Microsoft Outlook), the calendars are very easy to handle.

The new calendar views are part of the standard delivery for R/3 Enterprise. They can also be implemented in Release 4.6C on a project basis. (See SAP Note 421014)

If you are interested, you can create a SAP OSS message under the PT-RC-UI-TMW component.

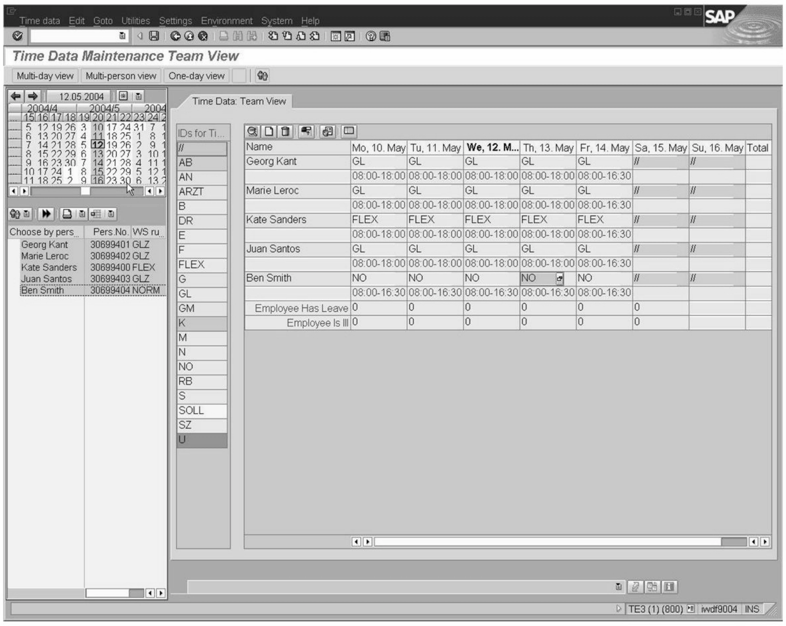


Figure 363: Maintaining Time Data in the Team View

The team view is new in the time data maintenance area of the TMW. The team view is a list-oriented color display of multiple employees' time data over a period of your choice. It provides an overview of the position and frequency of full-day and partial-day data for your entire team.

The team view is ideal for entering time data when you want a quick overview of full-day time data for your entire team. The different colors of the time data IDs enable you to note at a glance the position and frequency of the various shifts and to detect bottlenecks.

It is also suited to planning shifts and vacation for your team, since you have an overview of your team's full-day and multiple-day time data. To simplify the planning process, you can use a customer-specific Business Add-In (BAdI) to define additional rows and columns for the information you require. In addition, you can define rows with evaluations such as the number of employees on vacation.

For your day-to-day planning needs, you can also define a customer-specific row with evaluations such as the number of employees off sick or a shift counter displaying the number of early, late, or night shifts, for example.

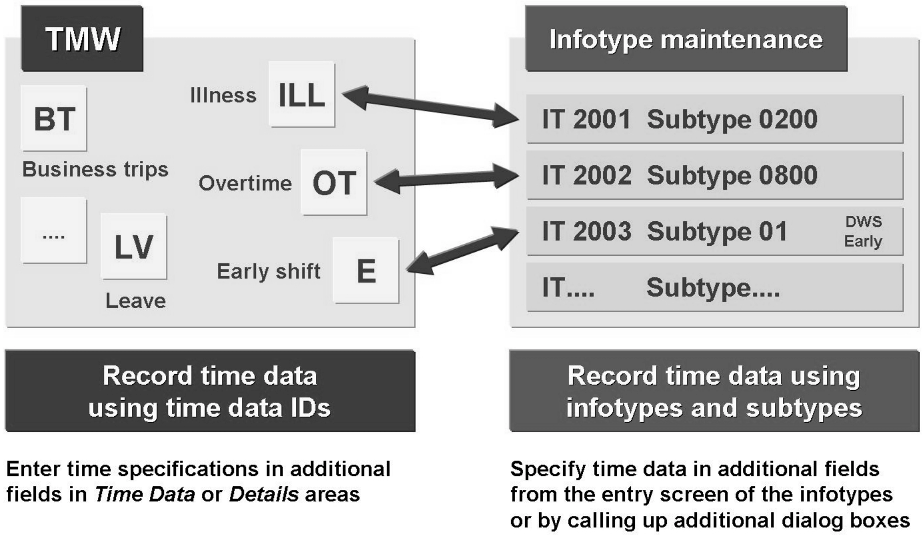


Figure 364: Recording Time Data: Infotype Maintenance in the TMW

The **Time Manager's Workplace** (TMW) provides an easy-to-use user interface for recording time data. Time data is recorded using intuitive time data IDs. The time data is still stored in the individual time infotypes.

IDs are defined in Customizing to represent each type of time data. For example, a time data ID such as "OT" can be defined for an attendance type to be valuated with an overtime compensation type (such as basic pay for time off) in time evaluation. The time data ID is assigned to the *Attendances* infotype (2002) and subtype for this attendance type in Customizing. In addition, the overtime compensation type is also specified for the time data ID.

Time data entered in the TMW using time data IDs can be processed in the *Time Data Maintenance* transaction and vice versa.

Time data IDs can also be generic if corresponding subtypes are not specified. If time administrators use a generic ID for time data, then they are advised to specify more detailed information in the Details area.

619

Exercise 30: Time Data Recording

Exercise Duration: 30 Minutes

Exercise Objectives

After completing this exercise, you will be able to:

- Enter time data using the Time Manager's Workplace and by maintaining infotypes

Business Example

Employees at your enterprise work according to the times specified in their work schedules. However, deviations can occur. Employees call in sick, go on vacations, fill in for other employees, work overtime, and so on.

Task 1:

Hint: Use the following personnel number for this exercise:

306993## Jane Miller (Salaried employee)

where ## = your group number

Entering and Maintaining Time Data Using the *Time Manager's Workplace*

1. Access the *Time Manager's Workplace*. For this part of the exercise, you will be working in the **Time Data** area.
2. Temporarily add your employee Jane Miller to the employee list.
3. Jane Miller (*306993##*) has requested 3 days of leave. Enter a leave record for a three-day period in the previous month. Use the time data ID ***L***.
4. Jane also has a one-day business trip this month. Use the time data ID ***DR***.
5. Enter a partial-day absence for a doctor's appointment on Monday of next week from 1:00 p.m. to 3:00 p.m. Use the time data ID ***DR***.

Task 2:

Check your entries in the *Calendar* area

1. Switch from the *Time Data* tab page to the *Calendar* tab page. The data is displayed graphically. Check your entries for Jane Miller in the monthly view. Choose the period as usual in the calendar in the top left screen area.
2. **Find out the date of Easter Monday this year**

Continued on next page

One of your employees would like to take a day off on the Tuesday following Easter Monday this year. In the monthly calendar view, find out when Easter is this year and therefore the date that the employee wants to take off.

3. **Check your entries in the infotype maintenance function**

   Access the infotype maintenance function from the SAP Easy Access Menu (or choose transaction PA61).

   Check whether the data you saved in the TMW has arrived correctly.

Task 3: Optional Exercise: Enter Time Data by Maintaining Infotypes

Enter similar time data to that detailed above by maintaining the appropriate infotypes.

1. Access infotype maintenance.
2. Enter a three-day leave record using the *Absences* infotype (2001), subtype *0100*.
3. Enter a one-day business trip using the *Attendances* infotype (2002), subtype *0400*.
4. Enter a partial-day doctor’s appointment (from 1:00 p.m. to 3:00 p.m.) using the *Absences* infotype (2001), subtype *0230*.

Solution 30: Time Data Recording

Task 1:

Hint: Use the following personnel number for this exercise:

306993## Jane Miller (Salaried employee)

where ## = your group number

Entering and Maintaining Time Data Using the *Time Manager's Workplace*

1. Access the *Time Manager's Workplace*. For this part of the exercise, you will be working in the **Time Data** area.

   a) **Accessing the Time Manager's Workplace**

      To access the *Time Manager's Workplace*, choose *Human Resources → Time Management → Administration → Time Manager's Workplace*.

2. Temporarily add your employee Jane Miller to the employee list.

   a) **Temporarily add an employee to the employee list**

      To add Jane Miller (personnel number *306993#*) temporarily to the employee list, click on the *Employee List* button in the *Employee List* screen area, and choose *Temporarily insert employee*.

      Enter the personnel number of your employee *Jane Miller, 306993##* (## = your group number), and then choose *Enter*.

3. Jane Miller (*306993##*) has requested 3 days of leave. Enter a leave record for a three-day period in the previous month. Use the time data ID ***L***.

   a) **Create a leave record for a period of several days**

      To enter time data for Jane Miller, double-click to select her name from the list.

      In the *Time Data* area, choose *Create details* (second button from the left).

      Enter time data ID ***L*** in the *Details* area and an applicable time period of three days in the *Date* field.

      (You will notice that the system closes a leave record and starts a new one each time you choose *Enter*.)

      If you enter a period that is not within the selected period in the calendar, a warning appears. Choose *Enter* to confirm the message, and save your entries.

Continued on next page

4. Jane also has a one-day business trip this month. Use the time data ID ***DR***.

   a) **Create a one-day business trip**

      Choose a selection period in the calendar during which you want to record the one-day business trip and the partial-day doctor's appointment.

      Overwrite the day dominant of a workday with the time data ID ***DR*** in the ID field of the *Time Data* screen area.

      Save your entries.

5. Enter a partial-day absence for a doctor's appointment on Monday of next week from 1:00 p.m. to 3:00 p.m. Use the time data ID ***DR***.

   a) **Create a partial-day doctor's appointment**

      Overwrite the day dominant of a workday with the time data ID ***DR*** in the ID field of the *Time Data* screen area. Enter 13:00 as the start time and 15:00 as the end time. Choose *Enter* to confirm your entries. The partial-day doctor's appointment automatically appears in a separate row.

      Save your entries.

Task 2:

Check your entries in the *Calendar* area

1. Switch from the *Time Data* tab page to the *Calendar* tab page. The data is displayed graphically. Check your entries for Jane Miller in the monthly view. Choose the period as usual in the calendar in the top left screen area.

   a) You should see the leave, business trip, and doctor's appointment you entered in this view too.

2. **Find out the date of Easter Monday this year**

   One of your employees would like to take a day off on the Tuesday following Easter Monday this year. In the monthly calendar view, find out when Easter is this year and therefore the date that the employee wants to take off.

   a) Select the relevant month in the calendar in the top left screen area.

      Choose the monthly view in the calendar.

      In the monthly and weekly view, public holidays are displayed in place of the date.

3. **Check your entries in the infotype maintenance function**

   Access the infotype maintenance function from the SAP Easy Access Menu (or choose transaction PA61).

Continued on next page

Check whether the data you saved in the TMW has arrived correctly.

a) Open a new session, and go to the infotype maintenance transaction. We recommend the *Time Data Maintenance* transaction (PA61). Alternatively, you can work in Master Data Maintenance (transaction PA30).

   Ensure that the doctor's appointment and leave has been created correctly for personnel number 306993## in the *Absences* infotype (2001).

   The business trip you entered is located in the *Attendances* infotype (2002).

Task 3: Optional Exercise: Enter Time Data by Maintaining Infotypes

Enter similar time data to that detailed above by maintaining the appropriate infotypes.

1. Access infotype maintenance.

   a) **Call time data maintenance**

      Choose *Human Resources → Time Management → Administration → Time Data → Maintain*.

      In the *Personnel number* field, enter the personnel number of your employee: *306993##* (## = your group number).

2. Enter a three-day leave record using the *Absences* infotype (2001), subtype *0100*.

   a) **Create a leave record for a period of several days**

      Enter the time period in the *Period* field.

      Enter *2001* (Absences) in the *Infotype* field and enter absence type *0100* (Leave) in the *STy* (Subtype) field.

      Choose the *Create* button, or *Edit → Create* from the menu.

      Save your entries. The *Maintain Time Data* screen appears again.

Continued on next page

3. Enter a one-day business trip using the *Attendances* infotype (2002), subtype *0400*.

   a) **Create a one-day business trip**

      Access the initial screen for time data maintenance.

      Enter the time period in the *Period* field.

      Enter *2002* (Attendances) in the *Infotype* field and enter attendance type *0400* (Business trip) in the *STy* (subtype) field.

      Choose the *Create* button, or *Edit* → *Create* from the menu.

      Save your entries. The *Maintain Time Data* screen appears again.

4. Enter a partial-day doctor's appointment (from 1:00 p.m. to 3:00 p.m.) using the *Absences* infotype (2001), subtype *0230*.

   a) **Create a partial-day absence (doctor's appointment)**

      Access the initial screen for time data maintenance.

      Enter the time period in the *Period* field.

      Enter *2001* (Absences) in the *Infotype* field and enter absence type *0230* (Partial-day doctor's appointment) in the *STy* (subtype) field. In the following screen, enter 13:00 to 15:00 in the *Time* field.

      Choose the *Create* button, or *Edit* → *Create* from the menu.

      Save your entries. The *Maintain Time Data* screen appears again.

Lesson Summary

You should now be able to:

- Name the various options for time recording

Unit Summary

You should now be able to:

- Describe the roles in Time Management
- Name the various options for time recording

627

Test Your Knowledge

1. Time data is best maintained in the SAP system centrally by one administrator.

   Determine whether this statement is true or false.

   □ True

   □ False

2. Which of the following options for recording time data are available in the SAP system?

   Choose the correct answer(s).

   □ A Self-service

   □ B Infotype maintenance

   □ C Flextime sheet

   □ D Time Manager's Workplace

   □ E Clock in/out using WAP cellular phone

628

Answers

1. Time data is best maintained in the SAP system centrally by one administrator.

   Answer: False

   The SAP role concept supports both centralized and decentralized scenarios for administering time data. This also enables various administrators to process the same time data from different perspectives.

2. Which of the following options for recording time data are available in the SAP system?

   Answer: A, B, D, E

   The SAP system provides various options for recording time data. Only the answer "flextime sheet" is not available in the standard system.

Unit 24

629 **Enterprise Structure and Groupings**

For more information, see the Instructor Guide in SAPNet.

Unit Overview

Using our business scenario as an example, you will learn how the personnel and enterprise structures are mapped in the SAP R/3 System.

Unit Objectives

After completing this unit, you will be able to:

- Describe the levels in the personnel and enterprise structures
- Explain the purpose of personnel subarea groupings and employee subgroup groupings in Time Management

Unit Contents

Lesson: Enterprise Structure and Groupings

630

Lesson Duration: 45 Minutes

Lesson Overview

This lesson describes the personnel and enterprise structures and explains the concept behind groupings of personnel subareas and employee subgroups.

Lesson Objectives

After completing this lesson, you will be able to:

- Describe the levels in the personnel and enterprise structures
- Explain the purpose of personnel subarea groupings and employee subgroup groupings in Time Management

For more information, see the Instructor Guide in SAPNet.

Business Example

- Using our business scenario as an example, you will learn how the personnel and enterprise structures are mapped in the SAP R/3 System.
- Our enterprise uses groupings to differentiate between various elements in R/3 Time Management.

Enterprise Structure

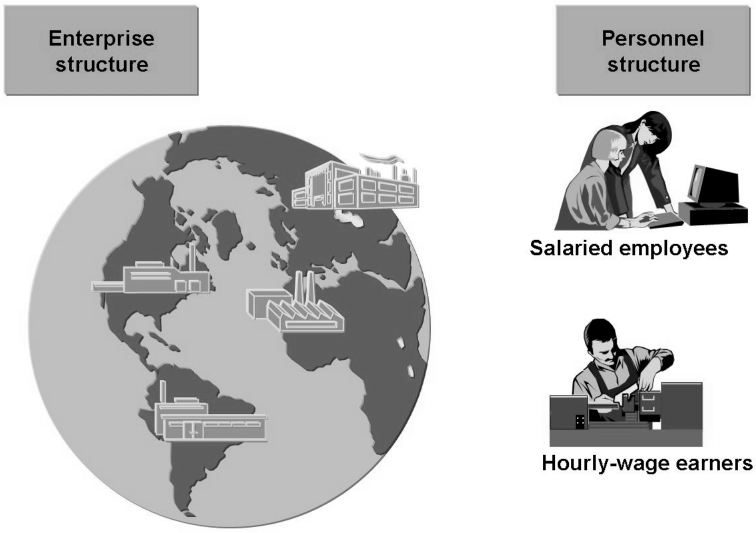


Figure 365: Overview of Enterprise and Personnel Structures

Each employee must be uniquely categorized to fit into enterprise and personnel structures. In other words, the employee works in a certain area (at Sales Office I, for example), and has a certain status (such as salaried employee or hourly-wage earner).

Categorizing an employee to fit into the enterprise and personnel structures takes place in the employee's master data record in the *Organizational Assignment* infotype (0001).The *Organizational Assignment* infotype must be created for every employee.

You set up the enterprise and personnel structures in the system by completing the Customizing steps in the Implementation Guide (IMG).

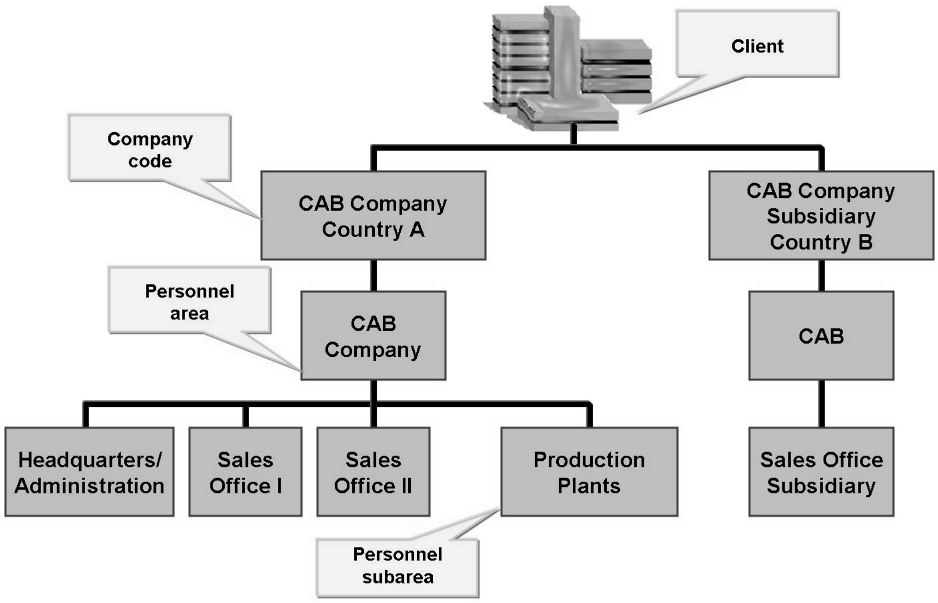


Figure 366: Example of an Enterprise Structure

The enterprise structure for personnel administration is determined by the following elements:

- Client
- Company code
- Personnel area
- Personnel subarea

The client can apply to a company code right through to the entire corporation. The company code is defined in Accounting. The balance of accounts required by law and the profit and loss statements are created on the company code level. The personnel area, used exclusively in personnel administration, is unique within the client. Each personnel area must be assigned to a company code. The last element in the enterprise structure is the personnel subarea, which is also used exclusively by personnel administration. The groupings that determine which settings can be used for an employee of a certain company code/personnel area are linked to the personnel subarea.

This graphic shows the enterprise structure of the CAB Company as an example of an enterprise structure represented in the SAP R/3 System.

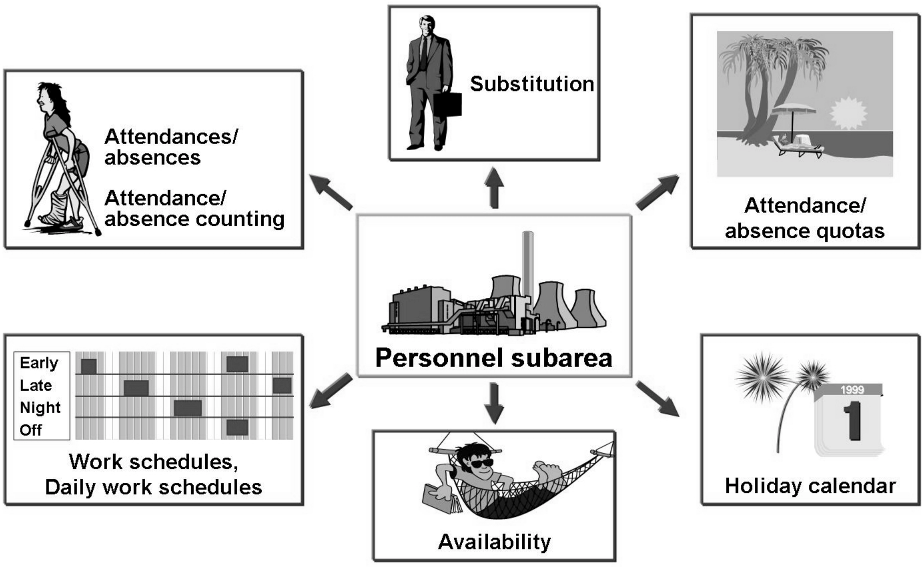


Figure 367: Personnel Subareas: Control Indicators

The control indicators determined by the personnel subarea for Time Management are:

- Assignment of a public holiday calendar to a personnel subarea
- Personnel subarea groupings for:
- Work schedule
- Attendance and absence types
- Substitution types and availability types
- Attendance and absence counting
- Time quotas
- Time recording

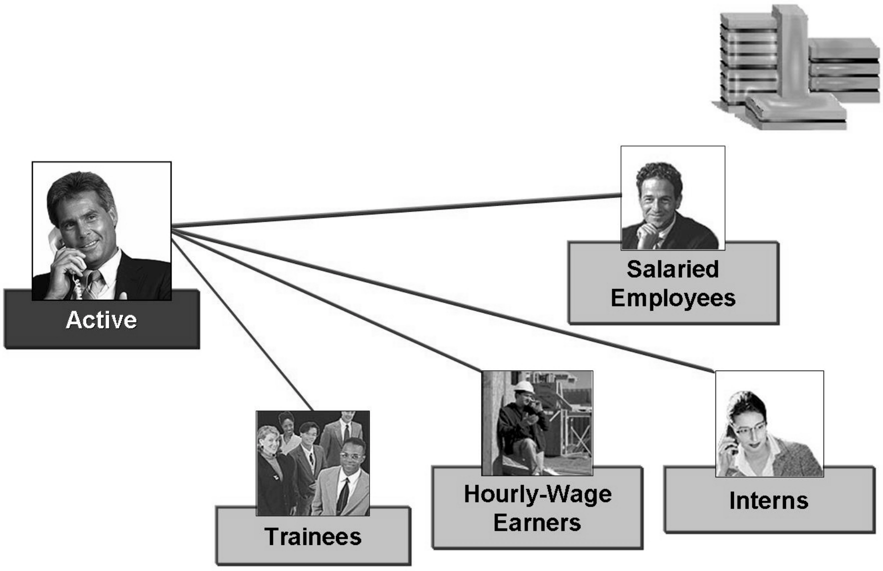


Figure 368: Example of a Personnel Structure

An employee group divides employees according to their working relationship in the enterprise (active, pensioner, early retiree, and so on).

An employee subgroup is a more specific division of the employee group based on employee status (salaried employees and hourly-wage earners are subgroups of the "Active" employee group).

All control features of the personnel structure are defined at the employee subgroup level.

The graphic above displays part of the personnel structure in place at the CAB Company.

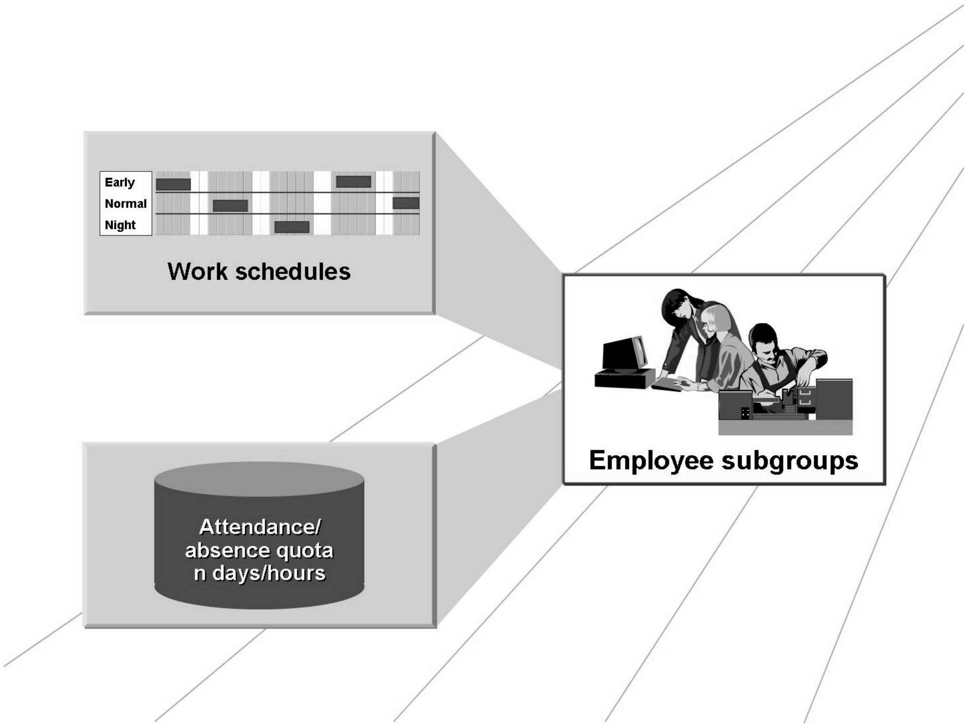


Figure 369: Employee Subgroups: Control Indicators

The control indicators determined by the employee subgroup for Time Management are:

- Employee subgroup grouping for work schedules
- Employee subgroup grouping for time quotas

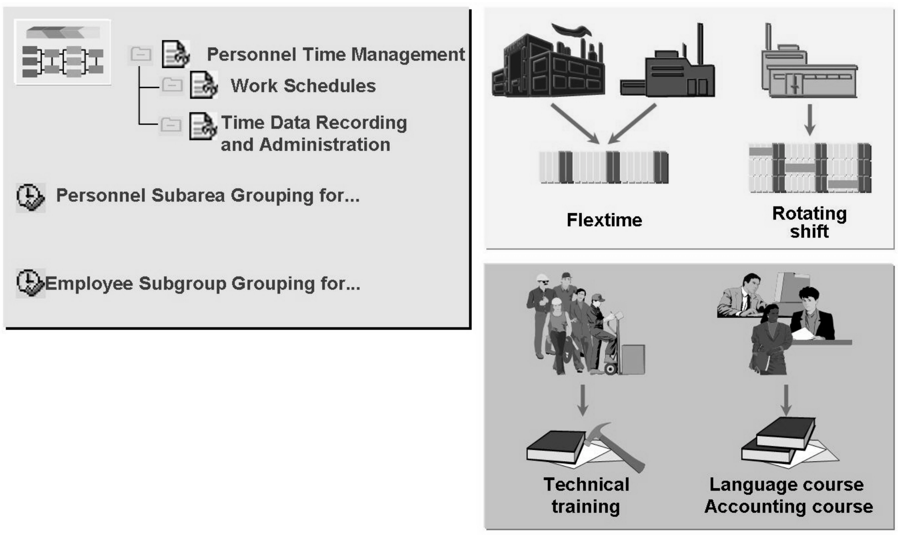


Figure 370: Groupings to Represent Differences and Similarities

Similarities and differences between personnel subareas or between employee subgroups based on their time management aspects are represented by groupings in the system.

The basic principle of the groupings is that all personnel subareas that are handled in the same way for one time management aspect (for example, they have the same work schedules) are assigned to a grouping. If any time management aspect is different among the personnel subareas, then these personnel subarea is assigned to different groupings.

By grouping personnel subareas, you can reduce the amount of time and effort spent on maintenance. (The permitted work schedules only need to be stored once for a grouping of personnel subareas, for example). In addition, you can control permissions on the basis of groupings. For example, the only work schedules permitted for a personnel area are those of the grouping to which the personnel subarea is assigned.

The same applies to employee subgroup groupings.

Groupings are assigned at various points in the IMG for Personnel Time Management.

Note:

Groupings are used not only in Time Management, but also in other SAP R/3 components, such as Personnel Administration and Payroll.

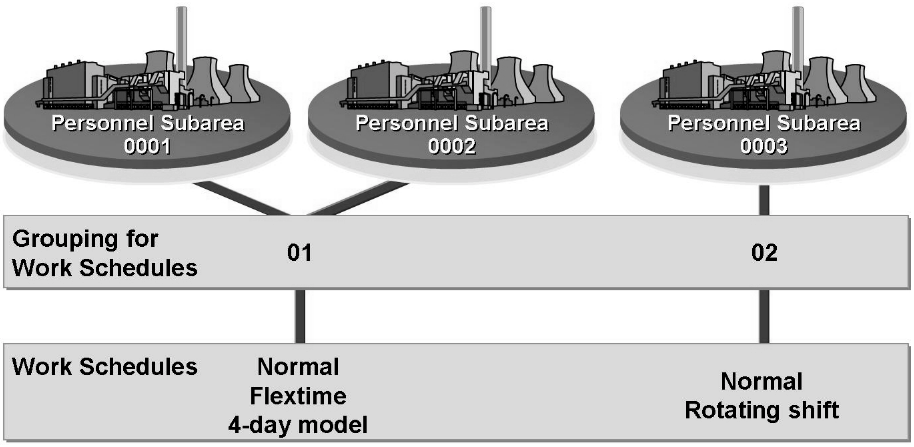


Figure 371: Example: Personnel Subarea Grouping for Work Schedules

A personnel subarea grouping for work schedules is a group of personnel subareas to which the same work schedule rules apply. This grouping allows you to control whether a work schedule is permitted within the personnel subareas.

Personnel subareas for which the same work schedule rules are valid have the same grouping. Several groupings are required, however, if different work schedule rules apply to different personnel subareas.

Work schedule rules assigned to different groupings may have the same name.

Example:

Employees in your personnel subareas **0001** and **0002** work according to the Normal, Flextime, and the 4-Day working time models. Employees in your personnel subarea **0003** work according to the Normal and Rotating Shift working time models. The work schedules valid for personnel subareas **0001** and **0002** are not permitted in personnel subarea grouping **0003**. The work schedules valid for personnel subarea **0003** are not permitted for personnel subareas **0001** and **0002**.

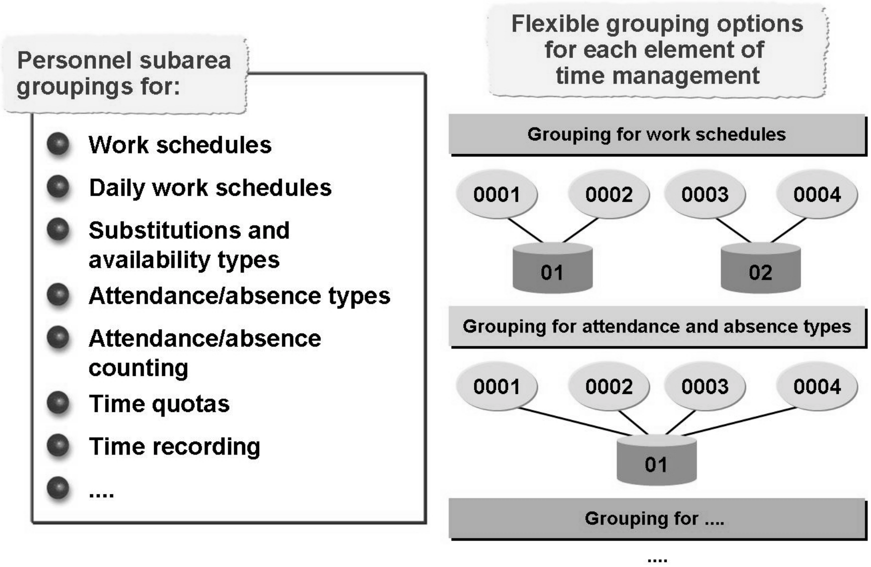


Figure 372: Additional Personnel Subarea Groupings

Personnel subareas can be regrouped for different time management aspects. Groupings are only based on one individual time management aspect and remain independent from each other.

Example:

The same work schedules are valid for both personnel subareas **0001** and **0002**. Different work schedules are valid for the personnel subareas **0003** and **0004**. Personnel subareas **0001** and **0002** are therefore assigned to grouping **01** for work schedules, and personnel subareas **0003** and **0004** are assigned to grouping **02**.

You do not, however, want to differentiate between personnel areas regarding the attendance and absence types: All attendance and absence types are permitted for the employees in all personnel subareas. For this reason, all personnel subareas are assigned to only one grouping, **01**, which contains all of the attendance and absence types that apply in the enterprise.

You can decide whether you need to distinguish between personnel subareas for the other groupings.

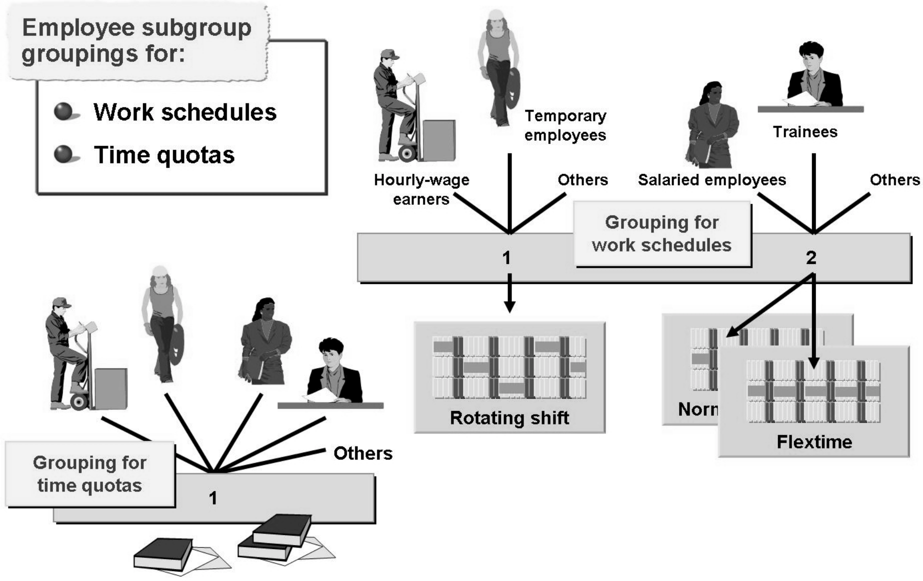


Figure 373: Employee Subgroup Groupings

The same principle that applies to personnel subarea groupings for certain time management aspects (such as work schedules, time quotas) also applies to employee subgroup groupings.

In this way, work schedules can also be defined for various groupings of employee subgroups. To do so, you define employee subgroup groupings for work schedules. The standard system already contains the groupings **1** (hourly-wage earners) and **2** (salaried employees). The groupings required are assigned to the individual employee subgroups.

Example:

If the work schedules for hourly-wage earners and salaried employees differ, and certain work schedules are only permitted for salaried employees and not for hourly-wage earners (and vice versa), then you set up one grouping for salaried employees and one for hourly-wage earners. If there are no differences for these employee subgroups, then one grouping is sufficient.

Employee subgroup groupings can also be set up for time quotas (absence entitlements, attendance approvals). In the standard system, time quotas are handled in the same way for all employee subgroups. The value **1** is assigned as the grouping for time quotas to all of the employee subgroups.

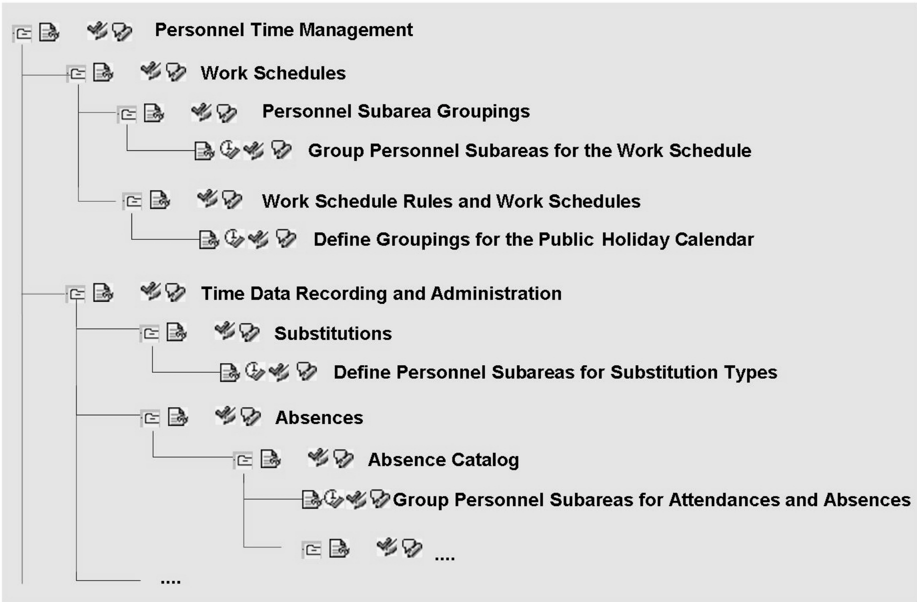


Figure 374: Personnel Subarea: Customizing Steps

The IMG contains an overview of all groupings in time management. You first have to generate a project for Personnel Time Management or a project that at least contains the Time Management component. Using this project, you can generate a view for steps required for personnel subareas and a view for the steps required for employee subgroups. In this way, you get a comprehensive overview of the groupings and assignments to be made.

You can check and assign the indicators determined for time management by the personnel subarea in a view containing the Customizing steps for personnel subareas. This is displayed in the figure above.

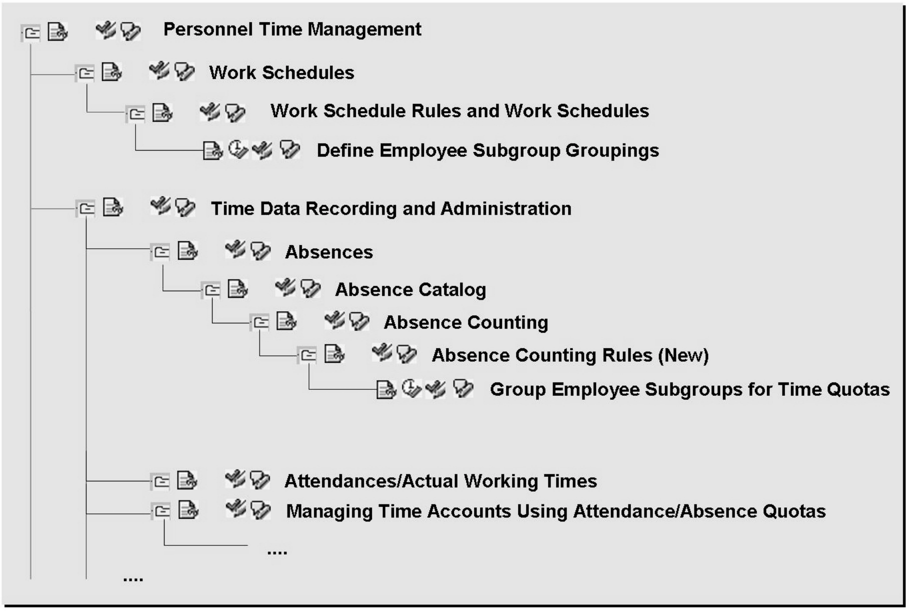


Figure 375: Employee Subgroups: Customizing Steps

You can check and assign the indicators determined for time management by the employee subgroups in a view containing the Customizing steps for employee subgroups. This is displayed in the figure above.

641 Exercise 31: Organizational Reassignment

Exercise Duration: 20 Minutes

Exercise Objectives

After completing this exercise, you will be able to:

- You carry out the personnel actions required for an organizational reassignment.

Business Example

Your employees undergo an organizational reassignment. Starting on January 1 of the current year, they are to be assigned to another personnel subarea (Production). You carry out the appropriate steps.

Task:

Organizational Reassignment

1. Carry out the *Organizational Reassignment* personnel action for your employees Karin Anderson and Tom Johnson starting from January 1 of the current year.

   Assign the personnel subarea *TP##*. Enter data for the subsequent infotypes as follows:

   Hourly-wage earner: Tom Johnson (Personnel number: 306991##)

   Salaried employee: Karin Anderson (Personnel number: 306992##)

   ## = your group number

Solution 31: Organizational Reassignment

Task:

Organizational Reassignment

1. Carry out the *Organizational Reassignment* personnel action for your employees Karin Anderson and Tom Johnson starting from January 1 of the current year.

   Assign the personnel subarea *TP##*. Enter data for the subsequent infotypes as follows:

   Hourly-wage earner: Tom Johnson (Personnel number: 306991##)

   Salaried employee: Karin Anderson (Personnel number: 306992##)

   ## = your group number

   a) Choose *Human Resources → Personnel Management → Administration → Master Data → Personnel Actions*.

      In the *Personnel number* field, enter the personnel number of the applicable employee (*306992##* for your salaried employee, for example). Then, enter the start date for the organizational reassignment in the *From* field (*January 1 of the current year*).

      Select the action type *Organizational reassignment* and choose *Execute*, or from the menu, choose *HR Master Data → Execute*.

      Save the subsequent *Actions* infotype (0000). Choose *Enter* to confirm the warning that appears.

      In the subsequent *Organizational Reassignment* infotype (0001), enter the personnel subarea *TP##* (## = your group number) in the *Personnel subarea* field and then save your entries.

      You do not need to make any entries in the subsequent infotypes. Skip them by choosing the *Next record* button, or *Goto → Next record* from the menu.

      Confirm the warning messages by choosing *Enter*.

      Carry out this personnel action for both employees (personnel numbers *306991##* and *306992##*).

Lesson Summary

You should now be able to:

- Describe the levels in the personnel and enterprise structures
- Explain the purpose of personnel subarea groupings and employee subgroup groupings in Time Management

Unit Summary

You should now be able to:

- Describe the levels in the personnel and enterprise structures
- Explain the purpose of personnel subarea groupings and employee subgroup groupings in Time Management

645

Test Your Knowledge

1. You can use the employee subgroup to specify control indicators for grouping work schedules.

   Determine whether this statement is true or false.

   □ True

   □ False

646

Answers

1. You can use the employee subgroup to specify control indicators for grouping work schedules.

   Answer: True

   You can use this grouping to, for example, divide work schedules that apply only to salaried employees or hourly-wage earners.

Unit 25

647

Work Schedules

For more information, see the Instructor Guide in SAPNet.

Unit Overview

This unit teaches you how to configure the public holiday calendar and work schedules.

Unit Objectives

After completing this unit, you will be able to:

- Describe the characteristics of public holidays
- Describe the structure of the public holiday calendar
- Understand the relevance of public holidays for payment and attendance/absence counting
- Set up the individual elements of work schedules
- Generate and assign a work schedule

Unit Contents

Lesson: Holiday Calendar

648

Lesson Duration: 15 Minutes

Lesson Overview

This lesson deals with the public holiday calendar and its functions.

Lesson Objectives

After completing this lesson, you will be able to:

- Describe the characteristics of public holidays
- Describe the structure of the public holiday calendar
- Understand the relevance of public holidays for payment and attendance/absence counting

For more information, see the Instructor Guide in SAPNet.

Business Example

Employees at your company work according to various work time models. Full-time employees work flextime or rotating shifts. Part-time employees can work a four-day schedule, for example. Prior to public holidays, some employees work a reduced schedule.

In this unit, you create the elements required to generate work schedules and you assign them to employees.

Holiday Calendar

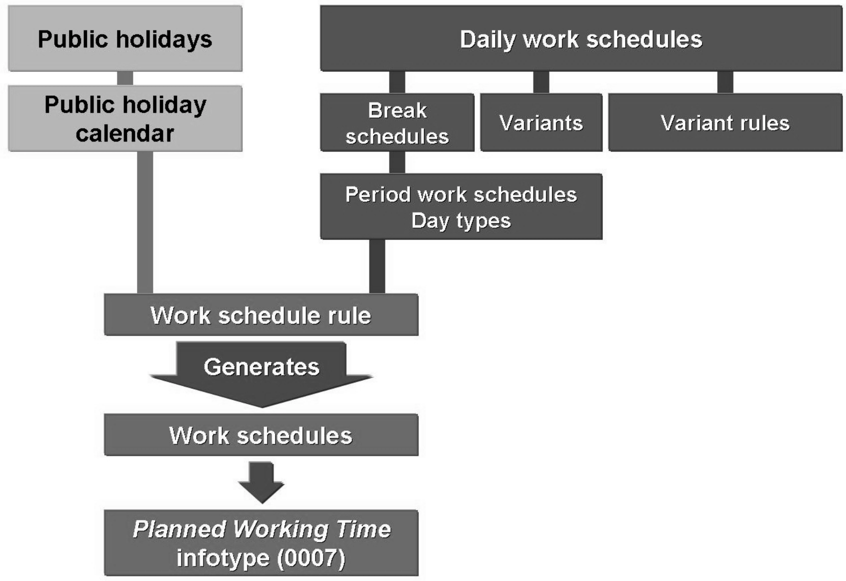


Figure 376: Creating Work Schedules: Customizing Steps

Prerequisites for SAP Time Management are a valid public holiday calendar with applicable public holidays and a valid work schedule.

A work schedule consists of a sequence of individual elements including a public calendar. After the individual elements are defined, they are combined in a work schedule rule, and a work schedule is then generated on the basis of the rule.

You carry out the necessary steps in Customizing.

A generated work schedule is assigned to employees in the *Planned Working Time* infotype (0007) using the work schedule rule.

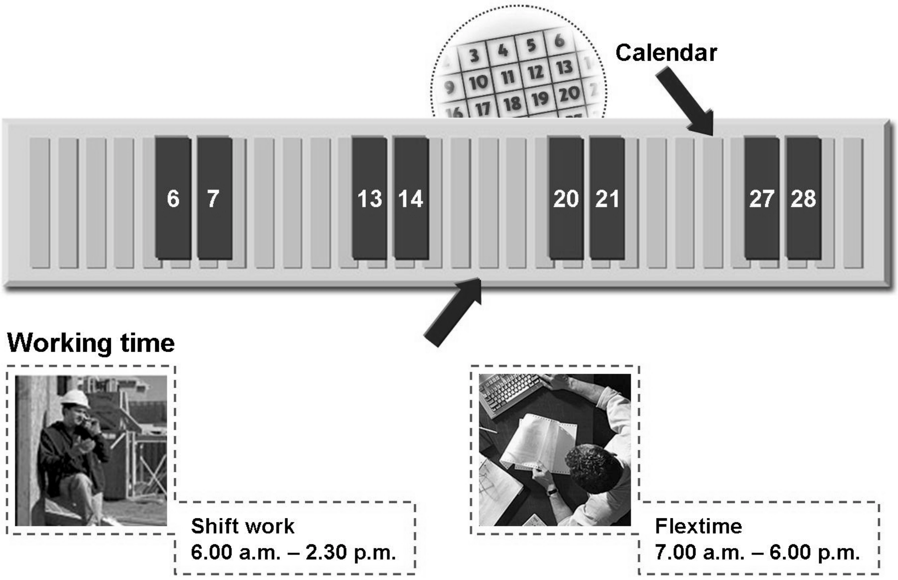


Figure 377: Work Schedules

The central element in SAP Time Management is the employee's work schedule. The work schedule contains planned specifications of an employee's working time, including breaks. The work schedule is based on a valid public holiday calendar.

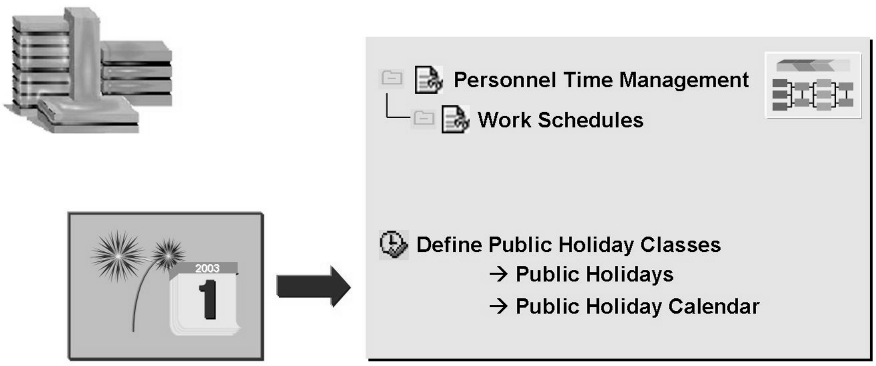


Figure 378: Public Holidays and Public Holiday Calendar

Different countries, regions, cities, and so on often have different public holidays. In Time Management, public holidays are grouped together in public holiday calendars. To set up a work schedule, you need a valid public holiday calendar including the applicable public holidays. The factory calendar is not significant.

Public holidays and public holiday calendars can be modified to suit regional and company-specific provisions.

You maintain public holidays and public holiday calendars under either *General Settings* or *Work Schedules* in the Implementation Guide (IMG) for Personnel Time Management.

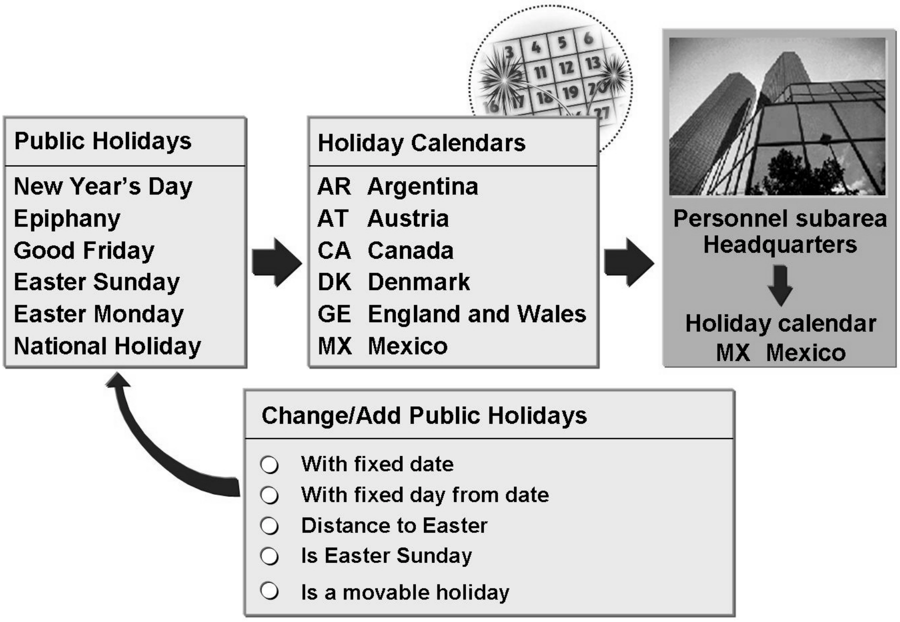


Figure 379: Holiday Calendar

Every work schedule is based on a valid public holiday calendar that includes all regional public holidays.

The standard system contains a sample list of public holidays and public holiday calendars.

You can define new public holidays and include them in a public holiday calendar. Existing holidays can also be partially modified or removed from a public holiday calendar.

You can delete public holiday calendars that are not used.

The validity of a public holiday calendar is specified by a validity period.

A public holiday calendar is assigned to a personnel subarea.

Public holidays are set up once and then can be incorporated in various calendars.

Public holidays can have one of the following characteristics:

Fixed date

Specific distance to Easter

Specific date and weekday

Without a fixed date

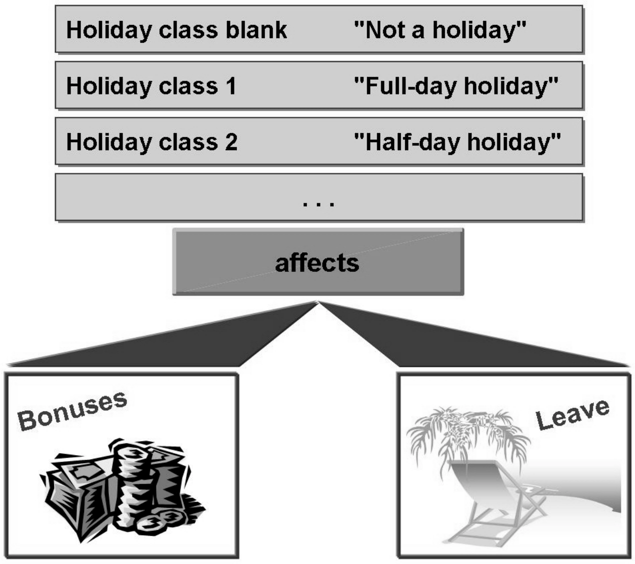


Figure 380: Defining Public Holiday Classes

Public holidays are grouped into public holiday classes in SAP Human Resources. The public holiday class is used for the selection of time wage types, daily work schedule variants, day types, and for absence counting.

In the standard system, the public holiday class 1 is assigned to full-day public holidays and the public holiday class 2 is assigned to half-day public holidays.

Not all public holidays are treated in the same way. Some collective agreements stipulate different holiday bonuses for working on certain public holidays, such as May 1. If you want to treat a public holiday differently, you can assign it an different public holiday class. You can use a value from 0 to 9 for the public holiday class; 0 or blank is used for days that are not public holidays.

Certain public holidays may only be relevant in specific religions, that is, the public holiday is observed only by employees of a particular religious group.

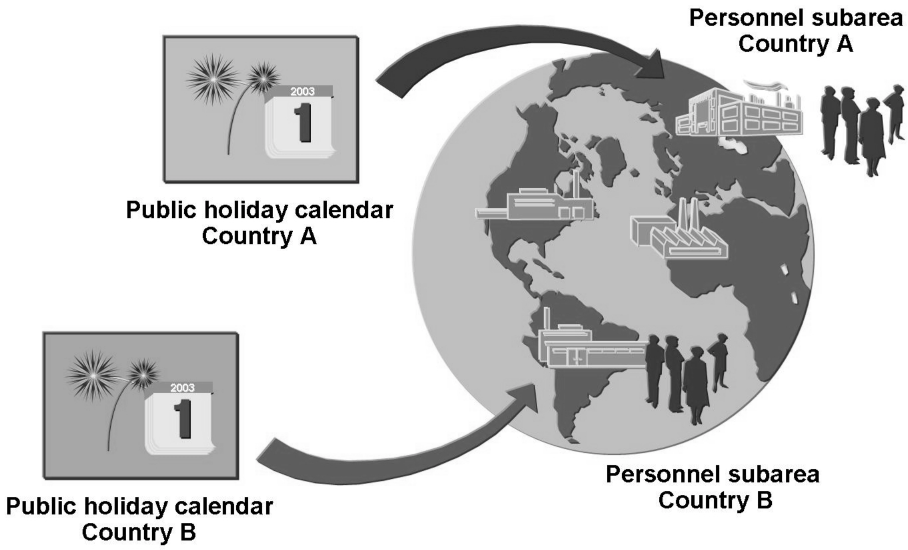


Figure 381: Assigning Public Holiday Calendars

Public holidays differ according to country and region. For this reason, public holidays are grouped together in public holiday calendars.

Every personnel area/personnel subarea has to be assigned a definitive public holiday calendar that is valid for the corresponding region (country, state, city, and so on).

Before you can assign holidays, you must first create the public holiday calendar and the personnel areas and subareas. The public holiday calendar that is valid for an employee depends upon the personnel area/subarea to which the employee is assigned.

Example:

The personnel area **0001** belongs to a plant in Argentina and is assigned the public holiday calendar **AR** (for Argentina). The personnel subarea **0002** refers to a plant in Bavaria, Germany, and is assigned the public holiday calendar **07**.

Facilitated Discussion

Discussion Questions

Use the following questions to engage the participants in the discussion. Feel free to use your own additional questions.

Lesson Summary

You should now be able to:

- Describe the characteristics of public holidays
- Describe the structure of the public holiday calendar
- Understand the relevance of public holidays for payment and attendance/absence counting

Lesson: Work Schedules

654

Lesson Duration: 120 Minutes

Lesson Overview

In this lesson, you learn about the work schedule and the elements that make it up, and how to configure them.

Lesson Objectives

After completing this lesson, you will be able to:

- Set up the individual elements of work schedules
- Generate and assign a work schedule

For more information, see the Instructor Guide in SAPNet.

Business Example

- Employees at your company work according to various work time models. Full-time employees work flextime or rotating shifts. Part-time employees can work a four-day schedule, for example. Prior to public holidays, some employees work a reduced schedule.
- In this unit, you create the elements required to generate work schedules and you assign them to employees.

Overview of Work Schedules

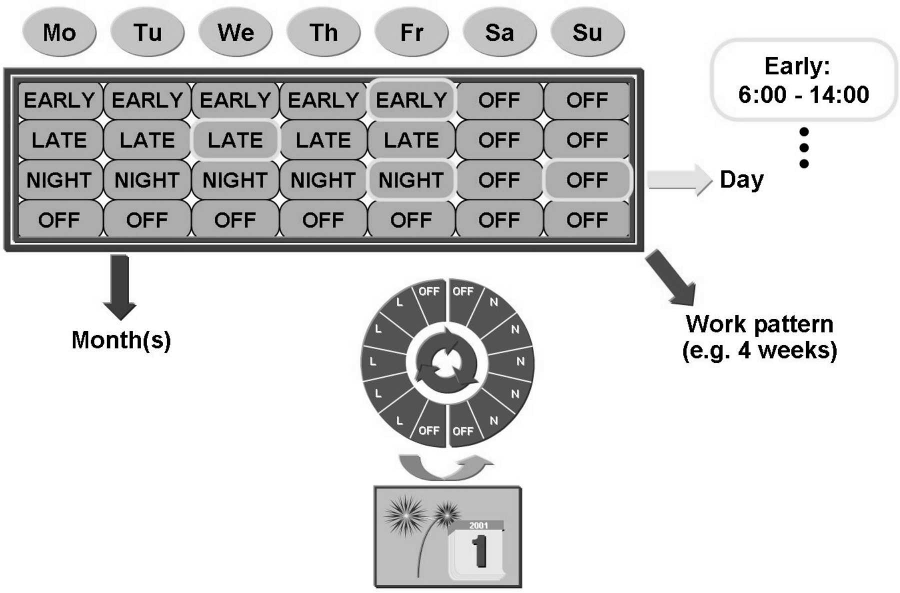


Figure 382: Work Schedule Levels

Work schedules define the work patterns for diverse groups of employees in an enterprise. Employees' contractual working times are set up in the work schedule.

A valid public holiday calendar is a prerequisite for every work schedule.

Specifications for work schedules are stored at three levels:

At the daily level, daily work schedules including the break schedule are specified. You can also include various daily work schedule variants (alternative versions of the daily work schedules).

At the weekly level, daily work schedules are arranged into a specific pattern in period work schedules.

At the monthly level, work schedules are created for several calendar months based on a valid public holiday calendar and a work schedule rule.

The work schedule is set up step-by-step in this unit.

Work schedules and daily work schedules can apply to one or more personnel subarea or employee subgroup groupings.

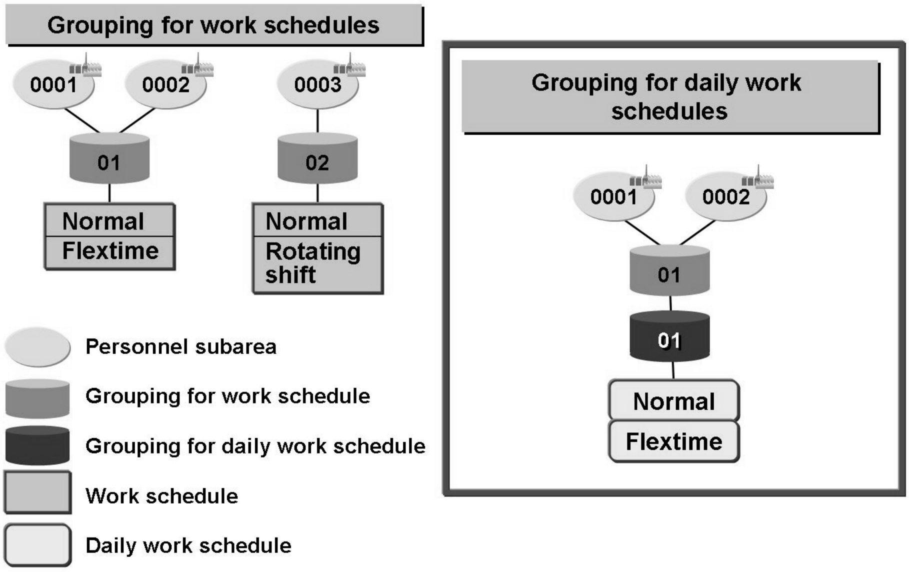


Figure 383: Personnel Subarea Groupings

A personnel subarea grouping for work schedules is a group of personnel subareas to which the same work schedule rules apply. This grouping allows you to control the permissibility of work schedules within the personnel subareas.

Personnel subareas for which the same work schedule rules are valid have the same grouping. Several groupings are required, however, if different work schedule rules apply to different personnel subareas.

A personnel subarea grouping for daily work schedules is a group of personnel subareas that base their daily work schedules on the same work schedules. This grouping is not assigned directly to the personnel subarea but is assigned to the grouping for work schedules. A personnel subarea grouping for daily work schedules can be assigned to one or more groupings for work schedules. In this way, the permissibility of the daily work schedules used is controlled within the personnel subareas. (The groupings for daily work schedules **01** to **50** are reserved for use in Time Management.)

Example: Personnel subareas **0001** and **0002** use the same work schedules and are thus assigned to the same grouping for work schedules (**01**). Consequently, they also use the same daily work schedules and are assigned to the same grouping for daily work schedules (**01**).

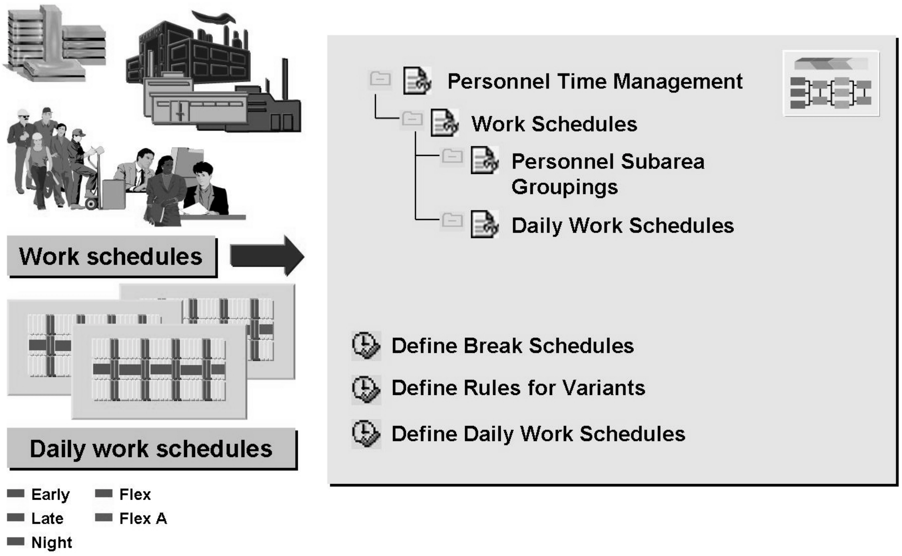


Figure 384: Daily Work Schedules and Variants

You must first define daily work schedules, including breaks, for the individual work schedules at your company.

Because some employees work a reduced schedule prior to public holidays, you must also define alternative versions of the daily work schedules, known as daily work schedule variants.

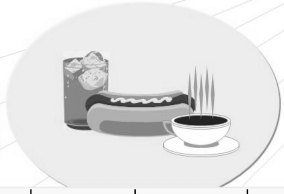
The conditions upon which the variants apply are defined in specific rules.

The smallest unit of the work schedule is the daily work schedule, which contains information on the individual workdays.

This information includes breaks and daily work schedule variants.

To set up the daily work schedules, complete the Customizing steps located in the *Work Schedules → Daily Work Schedules* section in the IMG for Personnel Time Management.

Break schedules



	Start	End	Unpaid	Paid	After	RefTime	Type 1
Fixed break	12:00	13:00	1.00				
Variable break	9:30	10:00	0.25				
Dynamic break			0.25		4.00		
Overtime break	22:00	22:10	0.17				O

Figure 385: Break Schedules

Breaks are periods of time during the workday when employees are not required to work.

The break schedule defines the rules governing breaks in a workday. The break schedule is assigned to a personnel subarea grouping for daily work schedules. You can assign a break schedule to as many daily work schedules as you require.

Different types of breaks are defined in as follows in Time Management:

Fixed breaks: Breaks taken at a certain time (from 9:00 a.m. to 9:15 a.m., for example)

Variable breaks: Breaks that must be taken at any time within a specific interval. Employees themselves can determine the time when their break begins and ends (for example, an hour break to be taken between 12:00 noon and 2:00 p.m.).

Dynamic breaks: Breaks taken after a certain number of hours are worked (a 15-minute break must be taken after working 4 hours, for example). In the *RefTime* (reference time) field in the flextime working models, you can specify if a dynamic break is to be calculated from the start of planned working time or from the start of normal working time. The start of planned working time is the default setting in the standard system. Dynamic breaks can be defined in more detail in the DYNBR function in time evaluation.

Overtime breaks: Breaks taken when working overtime. The breaks are indicated by the break type 1 **O** for overtime.

You should assign breaks taken after midnight during night shifts to the previous day by activating the previous-day indicator in the *P* field.

If break schedules change after they are already assigned to daily work schedules, you must revaluate the applicable daily work schedules. The IMG contains an activity to complete this task.

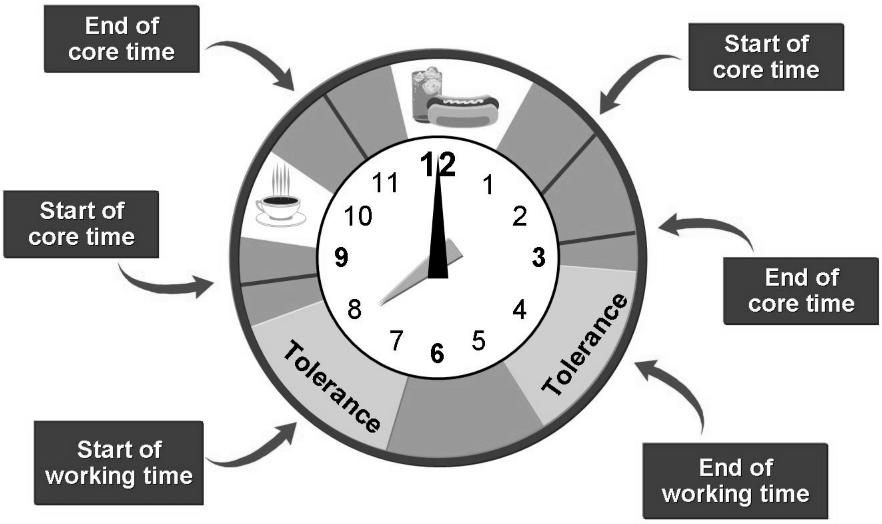


Figure 386: Daily work schedules

A daily work schedule contains the specifications for a workday

These specifications include the start and end of working time, planned working hours, and scheduled breaks.

You can also indicate whether or not general overtime approvals are permitted in the daily work schedule.

You can also add variants to the daily work schedule - a shortened version, for example. These versions are called daily work schedule variants. In the daily work schedule definition, you can specify whether or not these alternative versions of the daily work schedule are to be used.

Daily work schedules can contain predefined, fixed working times or flexible working times (flextime work schedules).

Flextime work schedules contain a period of time within which employees may clock in and clock out (where actual times are recorded).

Core times can also be defined for flextime work schedules, that is, specific times when employees are required to be at work.

Daily work schedules can also contain begin and/or end tolerances. This prevents clock-in/clock-out times that differ only slightly from normal start or end of working time from being interpreted as overtime or working time violations.

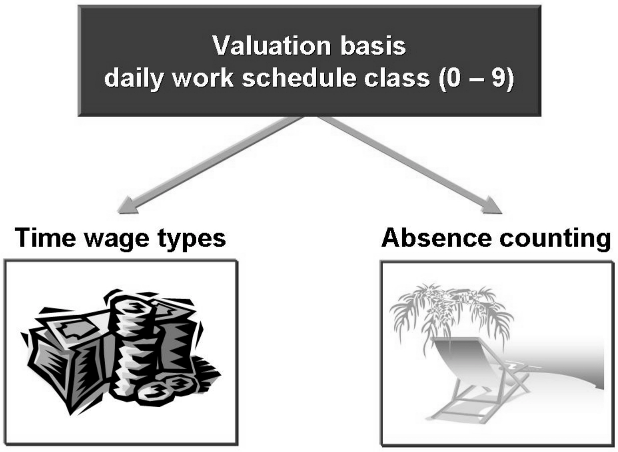


Figure 387: Daily Work Schedule Classes

A daily work schedule is a description of the duration and location of working time for an employee on any given workday.

A daily work schedule class is assigned to a daily work schedule, which is used as the valuation basis for the daily work schedule. Daily work schedule classes have a twofold purpose - they specify the conditions and rules for generating time wage types and also determine how absences and attendances are counted.

The *No planned working hours* checkbox is used to indicate daily work schedules containing days off. You can assign daily work schedule classes 0 – 9, as necessary, to distinguish the individual work schedules.

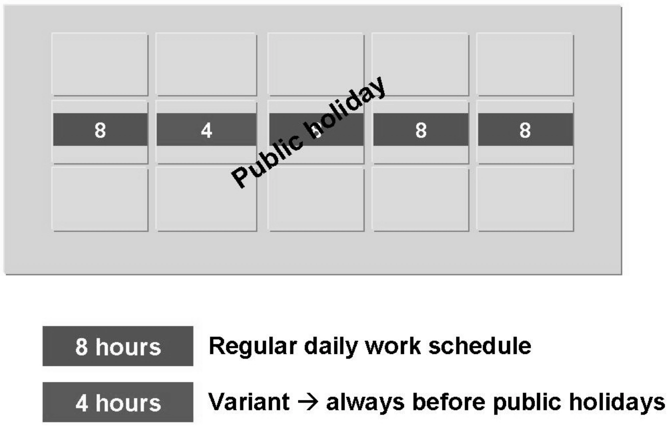


Figure 388: Daily Work Schedules and Variants

You can also create different versions of the daily work schedule, for example, a shortened version. These versions are called daily work schedule variants. Daily work schedule variants can be used prior to public holidays, for example.

A daily work schedule variant is an alternative version of a daily work schedule. A daily work schedule variant has the same name as the original daily work schedule, but an additional indicator, a letter or number, distinguishes it from its corresponding daily work schedule.

The daily work schedule variants can be included automatically when the system generates the monthly work schedules. To do so, you define rules that determine the conditions to be met in order for the daily work schedule variant to be used on a specific day, such as on days preceding public holidays.

Example:

Employees with flexible working times who work Monday through Friday according to the daily work schedule **FLEX** work fewer hours than usual prior to public holidays. This scenario can be set up by using a daily work schedule variant. The daily work schedule variant must in this example be called **FLEX** plus an additional indicator, such as **FLEX B** or **FLEX 1**, to distinguish it from the regular daily work schedule.

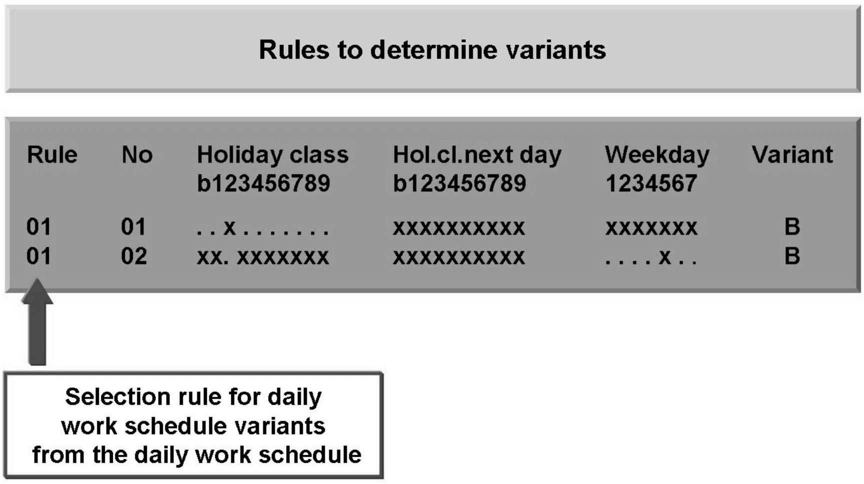


Figure 389: Daily Work Schedules: Variant Rules

Rules for daily work schedule variants are indicated by a two-digit number (rule). The daily work schedule specifies which selection rule is used to determine the daily work schedule variant. Therefore, a rule must already exist.

A rule can belong to several daily work schedules. Corresponding variants must exist for these daily work schedules, such as **FLEX B, NORM B**, and so on.

If a rule is applicable, the daily work schedule variant for the corresponding day (the current day) is referenced when the work schedule is generated.

Rules are defined for daily work schedule variants depending on the following characteristics:

Public holiday class of the current day

Public holiday class of the following day

Day of the week of the current day

A rule may contain several subrules. All subrules of the rule are run through sequentially until one of them applies. If no subrule is applicable, then no daily work schedule variant is referenced.

Example: For the above variant rule **01**, consisting of two subrules, **01** and **02**:

Subrule **01**: A daily work schedule variant with the suffix **B** is referenced when the current day is a half-day public holiday (public holiday class **2**), regardless of whether or not the following day is a public holiday (no matter what public holiday class), and regardless of the day of the week of the current day.

Subrule **02**: Variant **B** is referenced when the current day is not a half-day public holiday (all public holiday classes except **2**), regardless of whether or not the following day is a holiday (no matter what public holiday class), and if the current day is a Friday (Day 5).

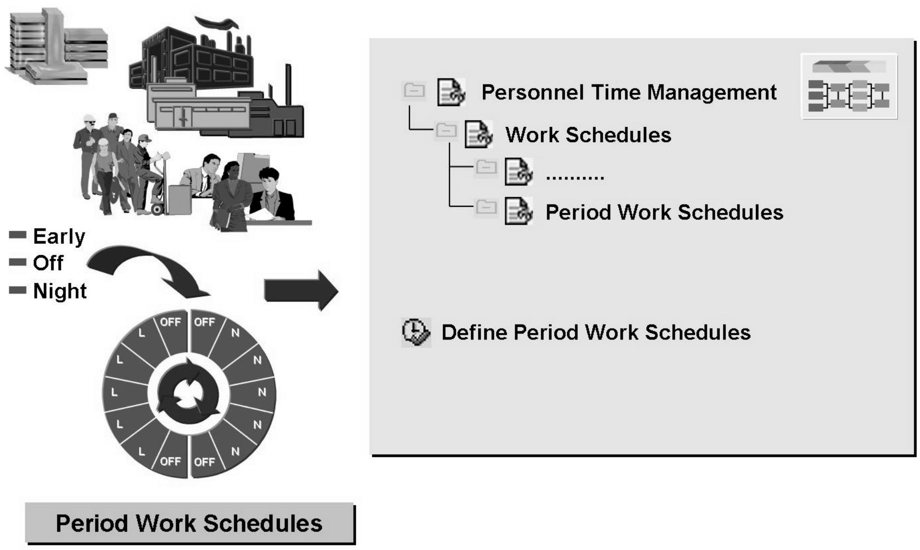


Figure 390: Period Work Schedules

Employees work according to various work patterns. Some work at the same times and on the same days every week, others work different times from week to week. Some employees work on weekends, others do not.

A working time pattern is represented in a period work schedule through a corresponding sequence of daily work schedules.

To set up the period work schedules, complete the Customizing steps located in the *Work Schedules* → *Period Work Schedules* section in the IMG for Personnel Time Management.

Grpg	PWS	PeriodWS Text		WkNo	01	02	03	04	05	06	07
01	Flex	Flex		001	FLEX	FLEX	FLEX	FLEX	FLEX	OFF	OFF
01	M3	3-shift	4W	001	E-11	E-11	E-11	E-11	E-11	E-11	OFF
01	M3	3-shift	4W	002	L-11	L-11	L-11	L-11	L-11	OFF	N-11
01	M3	3-shift	4W	003	N-11	N-11	N-11	N-11	N-11	OFF	OFF
01	M3	3-shift	4W	004	OFF	OFF	OFF	OFF	OFF	OFF	OFF

Group of daily work schedules in a specific pattern

FLEX: Weekly work pattern

M3: 3-shift operation over 4-week period

Figure 391: Period Work Schedules: Work Patterns

A period work schedule is the basis for generating a work schedule.

A period work schedule consists of a sequence of daily work schedules representing a certain work pattern.

A period work schedule can cover one week or more weeks, or even a part of a week.

The period work schedule is applied to a horizontal time axis (a valid public holiday calendar) that is then "rolled" (repeated) until a month or a longer period of time is completely covered. In other words, the pattern defined in the period work schedule repeats itself continuously.

The personnel subarea grouping for daily work schedules is a group of personnel subareas that use the same daily work schedules, period work schedules, and break schedules.

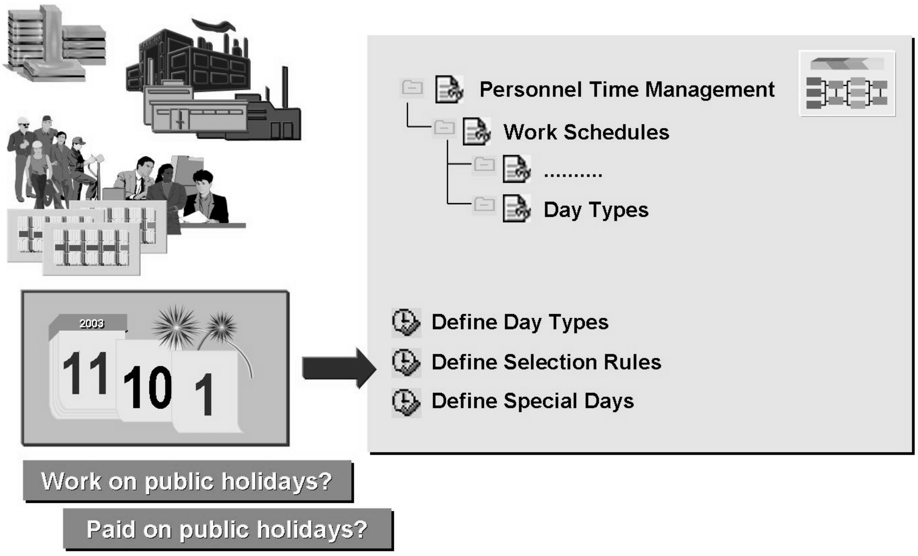


Figure 392: Day Types and Selection Rules

At your company, most employees in the production plant work on public holidays, for example. Other employees, such as salaried employees at headquarters and in administration, do not work on public holidays, but are paid for these days off.

Day types are used for determining whether employees have to work on public holidays and whether they are still paid on these days.

To set up day types, complete the Customizing steps located under *Work Schedules* → *Day Types* in the IMG for Personnel Time Management.

Day types	Meaning
blank	Work/paid
1	Off/paid
2	Off/unpaid
3	Off/special day
. . .	. . .

Figure 393: Day Types: Definition

Public holidays on working days, Saturdays, and Sundays can be handled differently for various employee groups. The deciding factors are whether or not employees must work on a specific day and whether or not they are paid.

The day type determines payment as well as planned absences and attendances for a specific calendar day in the work schedule. The day type is necessary for absence counting and for wage type selection.

The standard system contains four day types:

blank: Day on which an employee works and is paid

1: Day on which an employee does not work, but is still paid

2: Day on which an employee does not work and is also not paid

3: Special day on which an employee does not work and is paid according to payroll rules

In the work schedule, the day type determines whether employees must work on a specific day and whether or not they are paid.

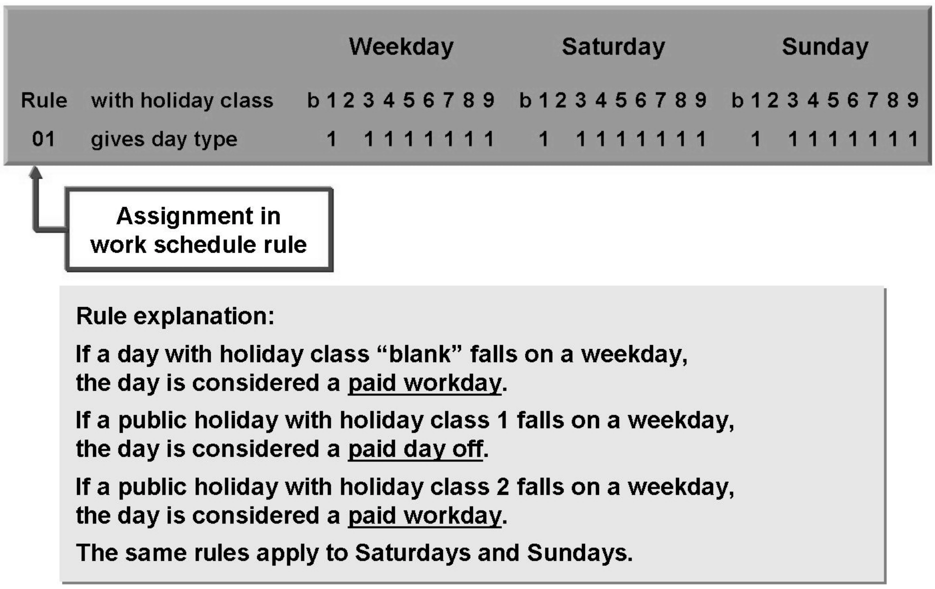


Figure 394: Define Selection Rules

Day types are assigned to the individual calendar days using selection rules for day types.

The day type is determined by the day of the week (workday, Saturday, Sunday) and by the public holiday class for that day of the week.

The selection rules are indicated by a number (rule). The work schedule rule specifies which rule is used to determine the day type.

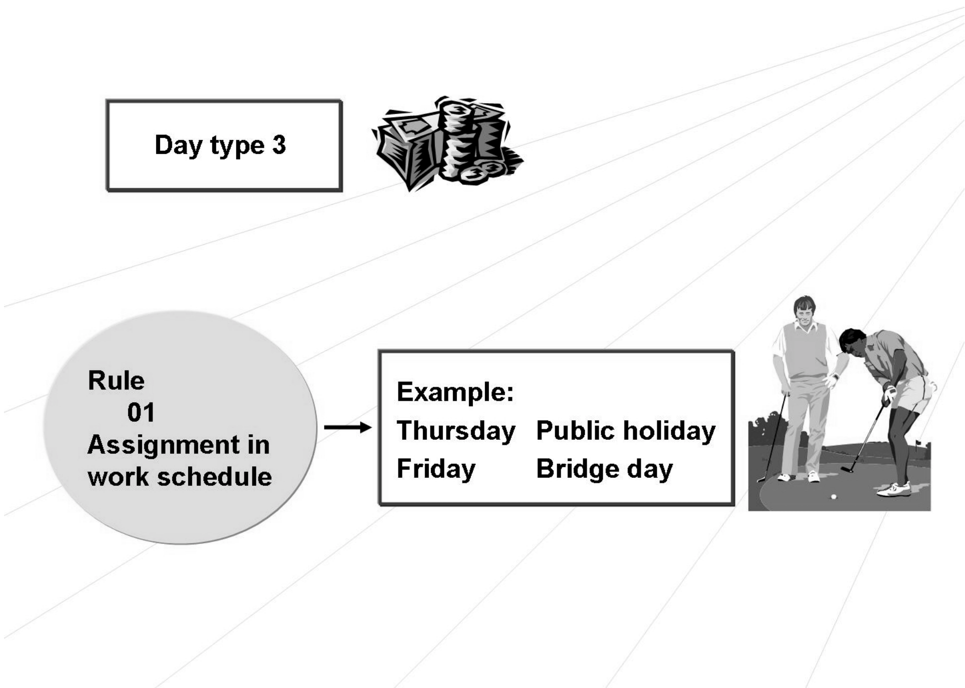


Figure 395: Defining Special Days

Special days are days that are not public holidays but are handled differently. Such special days include "bridge days" immediately before or after a public holiday, that is, days on which a group of employees might be off work.

Special days are indicated by day type **3** in the standard system. A special day is defined by a specific date; the applicable day type for special days is assigned directly, regardless of the day of the week or public holiday class. This date is assigned to a selection rule for day types. One or more special days can be defined for each selection rule.

The selection rule for day types (including the specification of special days) is assigned to the work schedule rule.

You determine the payment for special days in Payroll.

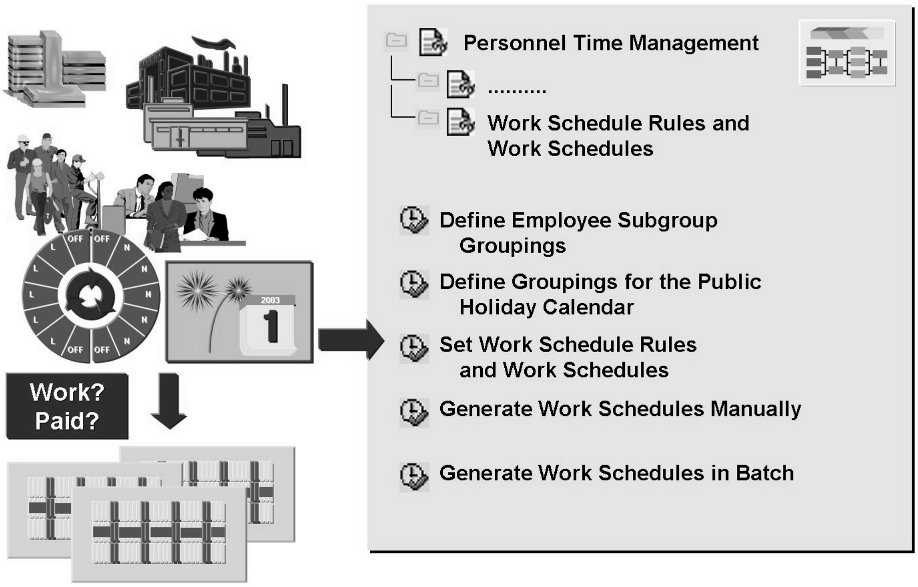


Figure 396: Work Schedule Rules and Work Schedules

After the individual elements have been set up for work schedules, you can now define work schedule rules, including flextime models or rotating shifts. Work schedules can then be generated and assigned to employees.

To define work schedule rules and generate monthly work schedules, complete the Customizing steps in the *Work Schedules* → *Work Schedule Rules and Work Schedules* section of the IMG for Personnel Time Management.

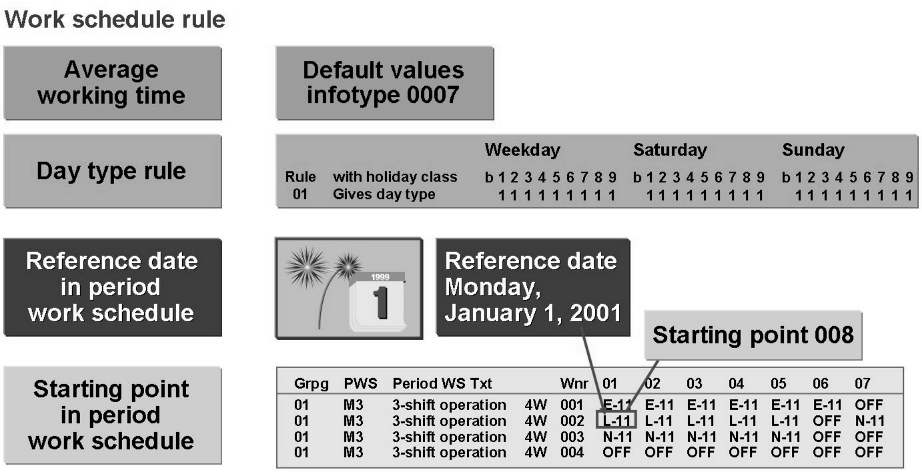


Figure 397: Defining Work Schedules: Work Schedule Rules

The work schedule rule contains employees' average working times.

This data is used in payroll, for example.

You can store various rules relating to work on public holidays in the work schedule rule. This is determined by the selection rules for day types. Day types specify whether or not employees must work on public holidays and whether they are paid for the work.

To apply ("roll") the period work schedule to the public holiday calendar, you must enter two pieces of information in a work schedule rule:

Reference date, that is, the date on which the period work schedule is to start. You are advised to use a reference date that falls on a Monday.

Starting point, that is, the position in the period work schedule at which the reference date is set.

Example:You choose January 01, 2001 (a Monday) as the reference point, and **008** (8th day in the period work schedule) as the starting point. The late shift applies on January 1, the days before and after this reference date are assigned an applicable daily work schedule once the period work schedule is applied.

Several work schedule rules can be based on one period work schedule. You can use a period work schedule for as many public holiday calendars as required. When the system generates the work schedule, it references the public holiday calendar stored in the work schedule rule.

Note: You can use one period work schedule for different work schedule rules in rotating shifts. To do so, you only have to move the starting point by one week (starting point **001, 008**, and so on).

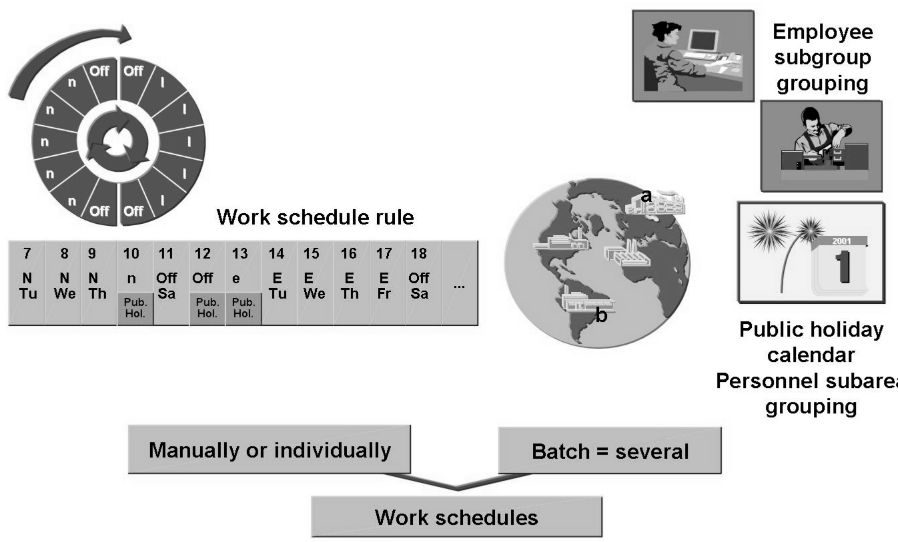


Figure 398: Work schedule

Defining planned working time for individual employees plays a central role in Time Management. This is set up in the HR system using work schedules.

The work schedule is generated by applying the period work schedule to a horizontal axis, the public holiday calendar, and repeated until the selected period is covered.

Work schedules MUST be generated. You can do this either manually or in batch.

Work schedules can be generated only if all required groupings are made and the work schedule rule is defined beforehand.

The automatic alternative enables multiple work schedules to be generated. These are generated out in a batch input session.

If you want all work schedules to be generated at one time, you only need to enter the time period to be generated. This method of generating work schedules does not apply to more than one client at one time.

Important note:

A previous and subsequent period of the work schedule must exist for each period to be calculated.

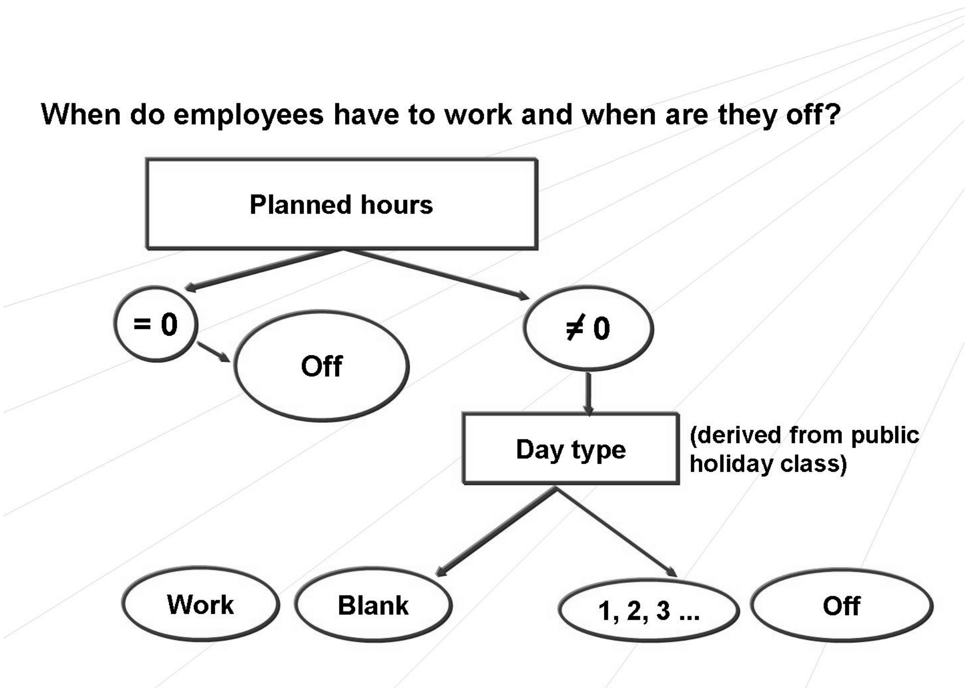


Figure 399: Determining Workdays

Whether or not a day is a day off in the work schedule is based on the following criteria:

Planned hours

Day type (derived from the public holiday class)

First, the planned hours are queried in the daily work schedule. If there are zero planned hours, the day is a day off; if not, the system checks the day type. The public holiday class is explicitly checked because the day type is derived from the public holiday class in the corresponding selection rules. In other words, the day type is always determined in accordance with the public holiday class. If the day type is not blank, the day is a day off.

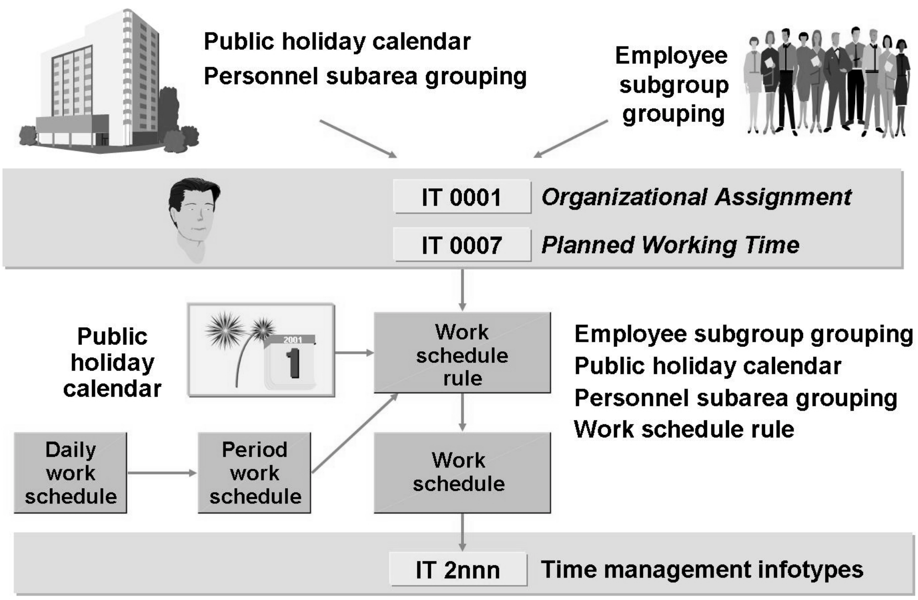


Figure 400: Planned Working Time

The work schedule is assigned to an employee using the work schedule rule in the *Planned Working Time* infotype (0007).

The employee's place in the enterprise structure defined in the *Organizational Assignment* infotype (0001) determines which work schedules can be assigned to him or her.

Data stored in the *Organizational Assignment* infotype (0001) determines whether a work schedule is permitted for a certain employee. Criteria such as employee subgroup and personnel area/subarea are checked. The system also checks if the work schedule was also generated for the employee subgroup or personnel area/subarea in question.

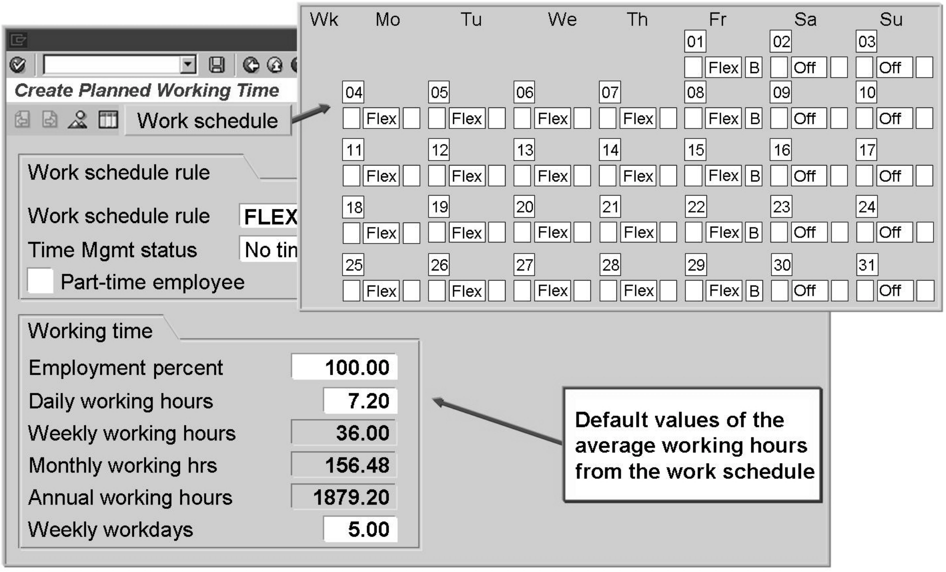


Figure 401: Planned Working Time: Overview

An employee's working time is stored as a work schedule rule in the *Planned Working Time* infotype (0007). In this infotype you also find the average working hours valid for the employee. These hours come from the definition of the work schedule rule.

In a business sense, planned working time is defined as the time between the start and end of work, excluding breaks. Planned working time specifies the time an employee has to work each day at the enterprise.

The *Time Management status* specifies whether the employee's times are processed using time evaluation or payroll.

Examples:

Time Management status:

0 = No time evaluation (processed in payroll)

1 = Evaluation of actual times

9 = Evaluation of planned times

An employee with the time management status of BLANK or 0 cannot be processed using time evaluation. This employee's time data is processed in payroll

Individualized information on an employee's working time is represented in their **personal work schedule**. Personal work schedules contain any recorded changes and exceptions to employees' working time (such as substitutions), as well as any changes made at a higher level (employee subgroup groupings or personnel subarea groupings). An employee's actual working hours (including any modifications to working time) for each month are included in the personal work schedule.

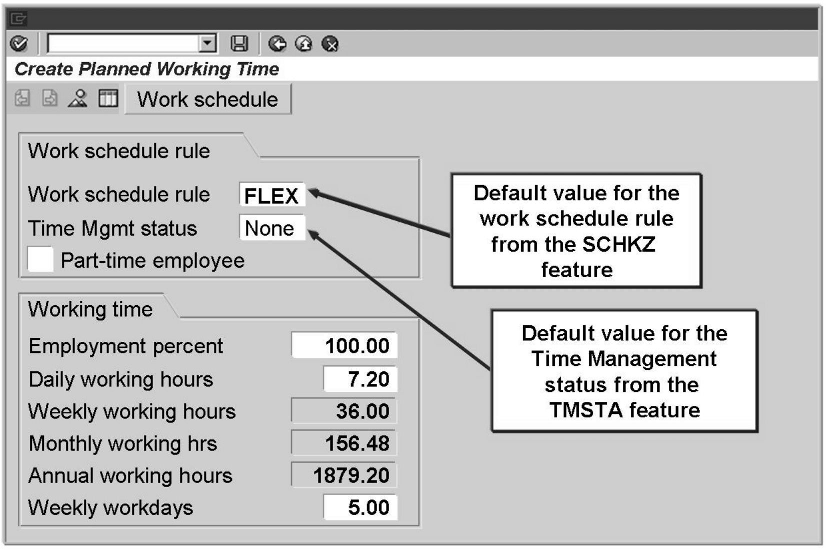


Figure 402: Default Values for Planned Working Time

You can use the **SCHKZ feature** to store default values for the *Planned Working Time* infotype (0007).

When you assign an employee a **planned working time** for the first time, on hiring, for example, you can use a **feature** to create a default for the work schedule based on the employee's organizational assignments.

For example, if you want to assign the FLEX work schedule to all salaried employees in the DT employee subgroup, but want the NORM work schedule to be the default for all other employees.

To access the feature, choose the following IMG path: *Personnel Time Management → Work Schedules → Planned Working Time → Set Default Value for the Work Schedule*; alternatively, access transaction PE03 (*Features: Initial Screen*) and enter **SCHKZ** as the feature. You can use the **TMSTA feature** to store default values for the Time Management status in the *Planned Working Time* infotype (0007).

The Time Management status specifies whether an employee is included in time evaluation and, if so, the type of time evaluation. You can use the feature to store a default value for the Time Management status in the *Planned Working Time infotype* which is used when an infotype record is created. You can have the value determined on the basis of an employee's organizational assignment.

The possible values are:

0 No time evaluation

1 Time evaluation of actual times

2 PDC time evaluation

7 Time evaluation without payroll integration

8 External services

9 Time evaluation of planned times

For example, you may want employees in **personnel area 0001** to take part in time evaluation, but not employees in personnel area **0002**. (default value 1 or 0)

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Exercise 32: Creating Work Schedules

Exercise Duration: 20 Minutes

Exercise Objectives

After completing this exercise, you will be able to:

- Create all elements of the work schedule

Business Example

Employees at your company work according to various work schedules. You set up and generate work schedules and assign them to employees at the CAB Company. In this exercise, you can choose between a work schedule with normal working time and a rotating shift.

Option 1: Regular Working Time (Karin Anderson) Work Schedules: Individual Elements (Regular Working Time)

Hint: If the system asks you to enter a country grouping, enter **99 – Rest of world**.

Follow the Customizing steps described below to create a work schedule with regular working times. When possible, copy sample work schedules provided in the system, and modify them as required. Finally, assign the generated work schedule, now called the work schedule, to your salaried employee.

Task 1:

Enter the IMG

1. In the Implementation Guide, choose *Personnel Time Management → Work Schedules*.

Task 2:

Check groupings

1. Check to make sure the grouping for work schedules for your personnel subarea ***TP## Production ##*** is ***01***.
2. Check to make sure the grouping for daily work schedules for your personnel subarea ***TP## Production ##*** is ***01***.

Continued on next page

Task 3:

Define a break schedule

1. Create break schedule ***PA##***. Enter three unpaid breaks as follows: From ***12:00 to 1:30 p.m.***, employees are entitled to a one-hour lunch break. From ***3:00 to 3:15 p.m.***, employees may take a coffee break. Enter an overtime break from ***10:00 p.m. to 10:15pm***. Use the grouping for daily work schedules ***01***.

Task 4:

Define rule for variants

1. The variant **1** is always valid on days defined by public holiday class **2** and on Fridays. Create rule **10 + ##** by copying and modifying the existing rule.

Task 5:

Define a daily work schedule

1. Define the daily work schedule **TZ## (Normal ##)**. Copy the daily work schedule **F-11**. Choose the grouping for daily work schedules **01**. Work starts at **08:00**, with a planned working time of 8 hours. Assign the break schedule **PA##** you previously created to the daily work schedule. Use the daily work schedule rule **10 + ##** that you also created previously.

Task 6:

Define a daily work schedule variant

1. Define a shortened version of your daily work schedule **TZ##** as variant **1** with four planned working hours from **8:00 a.m.** to **12:00 noon**.

Task 7:

Define a period work schedule

1. Group the daily work schedules **TZ##** and **OFF** into one period work schedule called **PZ##**. You can copy an existing period work schedule. Choose the grouping for daily work schedules **01**.
2. Employees work from Day 1 to Day 5 according to the daily work schedule **TZ##**, and are off on Day 6 and Day 7 (daily work schedule **OFF**).

Continued on next page

Task 8:

Check selection rule for day types

1. Your employees do not have to work on **full-day** public holidays (public holiday class **1**). Work is paid on **half-day** public holidays (public holiday class **2**). Check the selection rule **01**. This rule will be referenced later in the work schedule rule.

Task 9:

Define work schedule rule AZ##

1. In the IMG, choose *Personnel Time Management → Work Schedules → Work Schedule Rules and Work Schedules* and complete the following steps in sequence.
2. Check employee subgroup grouping

   Check the employee subgroup grouping. Make sure that an employee subgroup grouping already exists for your employees.
3. Check public holiday calendar

   Check the public holiday calendar assigned to the personnel subarea **TP## Production ##**.
4. Define a work schedule rule (1)

   Define the work schedule rule **AZ##**. Copy the work schedule rule **FLEX**. Use the employee subgroup grouping *Salaried employees* and the public holiday calendar assigned to your personnel subarea **TP##**, as well as the personnel subarea grouping for work schedules of your personnel subarea (**01**).

   Adopt the rule for day type **01**.

   Use your period work schedule **PZ##** and check the reference date and starting point.
5. Generate a work schedule for regular working time

   Generate the work schedule **AZ##** for the work schedule rule you created for a period of three years. As a start date, choose the December of the previous year, and as an end date the January of the current year plus 3.
6. Assign work schedule

   Assign the generated work schedule to your salaried employee, Karin Anderson (**306992##**, where ## = your group number), starting the first of this month in the *Planned Working Time* infotype.

Solution 32: Creating Work Schedules

Task 1:

Enter the IMG

1. In the Implementation Guide, choose *Personnel Time Management → Work Schedules*.

   a) To access Customizing, choose *Tools → Customizing → IMG → Edit Project*.

      The *Customizing: Project Processing* screen appears. If no project IMG for Time Recording has been generated, choose *Display SAP Reference IMG* or *Goto → Display SAP Reference IMG*.

      If a project IMG has been created (announced by the instructor), choose *Add to worklist*. In the subsequent *Add Project/Views to Worklist* window, check the corresponding project and choose *Copy*. Select the project now in your Customizing worklist and then choose *Display project*. The IMG appears for your project.

   b) In the Implementation Guide, choose *Personnel Time Management → Work Schedules*.

Task 2:

Check groupings

1. Check to make sure the grouping for work schedules for your personnel subarea ***TP## Production ##*** is ***01***.

   a) Choose ***Personnel Time Management → Work Schedules → Personnel Subarea Groupings → Group Personnel Subareas for the Work Schedule***.

      The grouping for work schedules for your personnel subarea ***TP##*** must be ***01***.

2. Check to make sure the grouping for daily work schedules for your personnel subarea ***TP## Production ##*** is ***01***.

   a) Choose ***Personnel Time Management → Work Schedules → Personnel Subarea Groupings → Group Personnel Subareas for the Daily Work Schedule***.

      The personnel subarea grouping for daily work schedules ***01*** must be assigned to the above personnel subarea grouping for work schedules.

Continued on next page

Task 3:

Define a break schedule

1. Create break schedule ***PA##***. Enter three unpaid breaks as follows: From ***12:00 to 1:30 p.m.***, employees are entitled to a one-hour lunch break. From ***3:00 to 3:15 p.m.***, employees may take a coffee break. Enter an overtime break from ***10:00 p.m. to 10:15pm***. Use the grouping for daily work schedules ***01***.

    a) Choose ***Personnel Time Management → Work Schedules → Daily Work Schedules → Define Break Schedules***.

       In the subsequent dialog box, choose (double-click) the ***Determine Break Schedules*** activity.

       Copy an existing break schedule or choose *New entries*.

       Because your break schedule consists of three breaks, you need three rows.

       Use the grouping for daily work schedule **01** and call your break schedule ***PA##***. Number the lines of the break schedule from**01** to **03**. Enter three unpaid breaks as follows: From **12:00 to 1:30 p.m.**, employees are entitled to a one-hour lunch break. From **3:00 to 3:15 p.m.**, employees may take a coffee break. Enter an overtime break from **10:00 p.m. to 10:15pm**. In the *Start* and *End* columns, enter the applicable times; enter the duration of the break in industrial hours (decimals) in the *Unpaid* column. To indicate an overtime break, you must enter the break type **O** (for overtime) in the **Type 1** column.

Continued on next page

Task 4:

Define rule for variants

1. The variant **1** is always valid on days defined by public holiday class **2** and on Fridays. Create rule **10 + ##** by copying and modifying the existing rule.

   a) Choose ***Personnel Time Management → Work Schedules → Daily Work Schedules → Define Rules for Variants***. The variant **1** of your daily work schedule is to be valid on half-day holidays as well as full-day holidays. To set up this up, create the rule **10 + ##**:

Rule	No.	Holiday class	Hol.cl.sub.day	Weekday	Variant
		b123456789	b123456789	1234567	
10 + ##	01	..x.......	xxxxxxxxxx	xxxxxxx	1
10 + ##	02	xx.xxxxxxx	xxxxxxxxxx	....x..	1

Task 5:

Define a daily work schedule

1. Define the daily work schedule **TZ## (Normal ##)**. Copy the daily work schedule **F-11**. Choose the grouping for daily work schedules **01**. Work starts at **08:00**, with a planned working time of 8 hours. Assign the break schedule **PA##** you previously created to the daily work schedule. Use the daily work schedule rule **10 + ##** that you also created previously.

   a) Choose ***Personnel Time Management → Work Schedules → Daily Work Schedules → Define Daily Work Schedules***.

      Select the entry **F-11** and then choose **Copy**, or choose ***Edit → Copy as*** from the menu.

      Enter **01** in the *DWS grouping* field and in the *Daily work schedule field* **DS##** (## = your group number). Name it **Normal ##**.

      Modify the planned working time as follows:

      Planned working hours: 8

      Start of planned working time: **8:00 a.m.**

      Enter the **rule 10 + ##** you created in the *DWS selection rule* field.

      In the *Break schedule* field, assign the break schedule **PA##** that you defined previously.

      Save your entries.

Continued on next page

Task 6:

Define a daily work schedule variant

1. Define a shortened version of your daily work schedule **TZ##** as variant **1** with four planned working hours from **8:00 a.m.** to **12:00 noon**.

   a) Choose ***Personnel Time Management → Work Schedules → Daily Work Schedules → Define Daily Work Schedules***.

      Select the entry **TZ##** and then choose **Copy**, or choose ***Edit → Copy as*** from the menu. Enter **TZ## variant 1** by filling the one-digit field for the variant after the field for the daily work schedule.

      Modify the planned working time as follows:

      Planned working hours: 4

      Start of planned working time: **8:00 a.m.**

      Remove the entry **PA##** in the *Break schedule* field.

      Save your entries.

Task 7:

Define a period work schedule

1. Group the daily work schedules **TZ##** and **OFF** into one period work schedule called **PZ##**. You can copy an existing period work schedule. Choose the grouping for daily work schedules **01**.

   a) Choose ***Personnel Time Management → Work Schedules → Period Work Schedules → Define Period Work Schedules***.

      Select and copy one of the existing period work schedules. Name your new period work schedule **PZ##** (## = your group number) and enter a description of your choice. Use the grouping for daily work schedules **01**. The week number should be **001**.

2. Employees work from Day 1 to Day 5 according to the daily work schedule **TZ##**, and are off on Day 6 and Day 7 (daily work schedule **OFF**).

   a) For days **01** to **05**, enter the daily work schedule **TZ##**, and the daily work schedule **OFF** for days **06** and **07**.

Continued on next page

Task 8:

Check selection rule for day types

1. Your employees do not have to work on **full-day** public holidays (public holiday class **1**). Work is paid on **half-day** public holidays (public holiday class **2**). Check the selection rule **01**. This rule will be referenced later in the work schedule rule.

   a) Choose ***Personnel Time Management → Work Schedules → Day Types → Define Selection Rules***.

   Check the selection rule **01**. It will be referenced again in the work schedule rule. Your employees have to work on half-day public holidays, but not full-day public holidays.

Rule		Weekday	Saturday	Sunday
	With holiday class	b123456789	b123456789	b123456789
01	Gives day type	1 1111111	1 1111111	1 1111111

Task 9:

Define work schedule rule AZ##

1. In the IMG, choose *Personnel Time Management → Work Schedules → Work Schedule Rules and Work Schedules* and complete the following steps in sequence.

   a) In the Implementation Guide, choose ***Personnel Time Management → Work Schedules → Work Schedule Rules and Work Schedules***.

2. Check employee subgroup grouping

   Check the employee subgroup grouping. Make sure that an employee subgroup grouping already exists for your employees.

   a) Check employee subgroup grouping

   Choose ***Personnel Time Management → Work Schedules →Work Schedule Rules and Work Schedules → Define Employee Subgroup Groupings***.

   Check whether an employee subgroup grouping already exists for *Salaried employees* and make a note of the grouping. To do so, choose ***→Define Employee Subgroup Grouping***.

   Go back one step and now choose ***→Group Employee Subgroups for Work Schedules***.

   Check whether the above employee grouping for work schedules is assigned to your employee subgroup (*Salaried employees*).

Continued on next page

3. Check public holiday calendar

   Check the public holiday calendar assigned to the personnel subarea **TP## Production ##**.

   a) Check public holiday calendar

      Choose → ***Work Schedule Rules and Work Schedules → Define Groupings for the Public Holiday Calendar***.

      Check whether a public holiday calendar is already assigned to your personnel subarea **TP##**. Use the following public holiday calendar:

99

4. Define a work schedule rule (1)

   Define the work schedule rule **AZ##**. Copy the work schedule rule **FLEX**. Use the employee subgroup grouping *Salaried employees* and the public holiday calendar assigned to your personnel subarea **TP##**, as well as the personnel subarea grouping for work schedules of your personnel subarea (**01**).

   Adopt the rule for day type **01**.

   Use your period work schedule **PZ##** and check the reference date and starting point.

   a) Define a work schedule rule (1)

      Choose → ***Work Schedule Rules and Work Schedules → Set Work Schedule Rules and Work Schedules***.

      Select and copy an existing entry for salaried employees, such as FLEX. Use the employee subgroup grouping 2, the public holiday calendar assigned to your personnel subarea, and the personnel subarea grouping for work schedules 01. Name your work schedule rule **AZ##** (## = your group number) and enter a description of your choice.

      Note:

      If the work schedule you have copied has any entry in the Alternative work schedule rule field in the *Reduced work* area, delete this entry before saving your work schedule rule.

   b) Adopt the rule for day type **01**.

   c) Enter the period work schedule you created, **PZ##**, in the appropriate field. Choose **January 1, 1990**, as the reference date (or another Monday), and **001** as the starting point. Save your entries.

      Save your entries.

Continued on next page

5. Generate a work schedule for regular working time

   Generate the work schedule **AZ##** for the work schedule rule you created for a period of three years. As a start date, choose the December of the previous year, and as an end date the January of the current year plus 3.

   a) Generate a work schedule for regular working time. Choose ***Personnel Time Management → Work Schedules → Work Schedule Rules and Work Schedules → Generate Work Schedules Manually***.

      Enter the following values in the entry screen for the work schedule:

Employee subgroup grouping	2
Holiday calendar	Public holiday calendar for your personnel subarea (99)
Personnel subarea grouping	01
Work schedule rule	AZ##
Calendar month from	December of previous year (in number format)
Calendar month to	January of current year + 3 (in number format)

      Note:

      The instructor may announce a different generation period

      Choose the *Create all* option, or choose ***Edit → Create all*** from the menu.

6. Assign work schedule

Continued on next page

Assign the generated work schedule to your salaried employee, Karin Anderson (**306992##**, where ## = your group number), starting the first of this month in the *Planned Working Time* infotype.

a) Assign work schedule

Open a new session (choose *System* → *Create session*) and then choose from the menu:

→Human Resources → Time Management → Administration → Time Data → Maintain.

For your salaried employee with the personnel number **306992##**, complete the following steps: Enter **Planned Working Time** (0007) in the *Infotype* field. Choose *Create* or *Edit* → *Create* from the menu. Enter the first of the current month as the valid from date.

Enter the work schedule rule **AZ##**.

Choose *Enter* to confirm the warning that appears and then save your entries.

685 Exercise 33: Creating Work Schedules (2)

Exercise Duration: 20 Minutes

Exercise Objectives

After completing this exercise, you will be able to:

- Create all elements of the work schedule

Business Example

Employees at your company work according to various work schedules. You set up and generate work schedules and assign them to employees at the CAB Company. In this exercise, you can choose between a work schedule with normal working time and a rotating shift.

Hint: If the system asks you to enter a country grouping, enter **99 – Rest of world**.

Option 2: Rotating Shift (Tom Johnson)

Work Schedules: Individual Elements (Rotating Shift)

Follow the Customizing steps described below to create a work schedule for a rotating shift. When possible, copy the samples provided in the system, and modify them as required. Finally, assign the generated work schedule, now called the work schedule, to your hourly-wage earner.

Task 1:

Enter the IMG

1. In the Implementation Guide, choose *Personnel Time Management → Work Schedules*.

Task 2:

Check groupings

1. Check to make sure the grouping for work schedules for your personnel subarea **TP## Production ##** is **01**.
2. Check to make sure the grouping for daily work schedules for your personnel subarea **TP## Production ##** is **01**.

Continued on next page

Task 3:

Define a break schedule

1. Create a break schedule called **PW##** with two dynamic unpaid breaks: After **4** hours, employees are entitled to a 15-minute break. After **6** hours, employees are entitled to a 45-minute break. Use the grouping for daily work schedules **01**.

Task 4:

Define a daily work schedule

1. Define the daily work schedule **EA## (Early ##)**. Copy the daily work schedule **F-11**. Choose the grouping for daily work schedules **01**. Work starts at **05:30**, with a planned working time of 7.75 industry hours (7 hours 45 minutes). Assign the break schedule **PW##** you previously created to the daily work schedule.
2. Define the daily work schedule **LA## (Late ##)**. Copy the daily work schedule **S-11**. Choose the grouping for daily work schedules **01**. Work starts at **2:00 p.m.** (14:00), with a planned working time of 7.75 industry hours (7 hours 45 minutes). Assign the break schedule **PW##** you previously created to the daily work schedule.
3. Define the daily work schedule **NT## (Night ##)**. Copy the daily work schedule **N-11**. Choose the grouping for daily work schedules **01**. Work starts at **10:30 p.m.** (22:30), with a planned working time of 6.25 industry hours (6 hours 15 minutes). Assign the break schedule **PW##** you previously created to the daily work schedule.

Task 5:

Define a period work schedule

1. Group the daily work schedules **EA##, LA##, NT##**, and **OFF** into one period work schedule called **WP##**. The work pattern repeats itself every three weeks. You can simply copy three weeks of an existing period work schedule. Choose the grouping for daily work schedules **01**.
2. Enter the following data for each week:

   Week 1: Employees work from Day 1 to Day 5 according to the daily work schedule **EA##**; Day 6 and Day 7 are days off.

   Week 2: Employees work from Day 1 to Day 5 according to the daily work schedule **LA##**; Day 6 and Day 7 are days off.

   Week 3: Employees work from Day 1 to Day 4 according to the daily work schedule **NT##**; and Day 5, Day 6, and Day 7 are days off.

Continued on next page

Task 6:

Check selection rule for day types

1. Your employees are required to work on public holidays. Check the selection rule **02**. This rule will be referenced later in the work schedule rule.

Task 7:

Define the work schedule rule AW##

1. In the Implementation Guide, choose ***Personnel Time Management → Work Schedules → Work Schedule Rules and Work Schedules***.
2. Check employee subgroup grouping

   Check the employee subgroup grouping. Make sure that an employee subgroup grouping already exists for your hourly-wage earners.
3. Check public holiday calendar

   Check the public holiday calendar assigned to the personnel subarea **TP## Production ##**.
4. Define a work schedule rule

   Define the work schedule rule **AW##**. Copy the work schedule rule **M3-1**. Use the employee subgroup grouping *Hourly-wage earners* and the public holiday calendar assigned to your personnel subarea **TP##**, as well as the personnel subarea grouping for work schedules **01**.

   Copy the rule for day types **02**.

   Use your period work schedule **WP##** and check the reference date and starting point.

Task 8:

Generate work schedule for rotating shift

1. Generate the work schedule **AW##** for a period of three years. As a start date, choose the December of the previous year, and as an end date the January of the current year plus 3.

Task 9:

Assign work schedule

1. Assign the generated work schedule to your hourly-wage earner in the *Planned Working Time* infotype, starting the first of this month.

Solution 33: Creating Work Schedules (2)

Task 1:

Enter the IMG

1. In the Implementation Guide, choose *Personnel Time Management → Work Schedules*.

   a) In the Implementation Guide, choose ***Personnel Time Management → Work Schedules***.

Task 2:

Check groupings

1. Check to make sure the grouping for work schedules for your personnel subarea **TP## Production ##** is **01**.

   a) Choose ***Personnel Time Management → Work Schedules → Personnel Subarea Groupings → Group Personnel Subareas for the Work Schedule***.

      The grouping for work schedules for your personnel subarea **TP##** must be **01**.

2. Check to make sure the grouping for daily work schedules for your personnel subarea **TP## Production ##** is **01**.

   a) Choose ***Personnel Time Management → Work Schedules → Personnel Subarea Groupings → Group Personnel Subareas for the Daily Work Schedule***.

      The personnel subarea grouping for daily work schedules **01** must be assigned to the above personnel subarea grouping for work schedules. Check to make sure that this assignment already exists.

Continued on next page

Task 3:

Define a break schedule

1. Create a break schedule called **PW##** with two dynamic unpaid breaks: After **4** hours, employees are entitled to a 15-minute break. After **6** hours, employees are entitled to a 45-minute break. Use the grouping for daily work schedules **01**.

   a) Choose ***Personnel Time Management → Work Schedules → Daily Work Schedules → Define Break Schedules***.

      In the subsequent dialog box, choose (double-click) the **Determine Break Schedules** activity.

      Copy an existing break schedule or choose the *New entries* option.

      Because your break schedule consists of two breaks, you need two lines.

      Use the grouping for daily work schedule **01** and call your break schedule **PW##**. Number the rows of your break schedule from **01** to **02**. In the *Unpaid* column, enter the duration of each break in industrial hours (decimals), and in the *After* column, enter how many hours the employee must work before he or she is entitled to the break. In the first line, enter a duration of **0.25** after **4** hours, and in the second line, enter a duration of **0.75** after **6** hours.

      Save your entries.

Task 4:

Define a daily work schedule

1. Define the daily work schedule **EA## (Early ##)**. Copy the daily work schedule **F-11**. Choose the grouping for daily work schedules **01**. Work starts at **05:30**, with a planned working time of 7.75 industry hours (7 hours 45 minutes). Assign the break schedule **PW##** you previously created to the daily work schedule.

   a) Choose ***Personnel Time Management → Work Schedules → Daily Work Schedules → Define Daily Work Schedules***.

      Select and copy the **F-11** entry and name it **EA## (Early ##)**. Use the personnel subarea grouping for daily work schedules **01**. Modify the planned working time as follows:

      Planned working hours: 7.75 industry hours (7 hours 45 minutes)

      Start of planned working time: 5:30 a.m.

      Assign the break schedule **PW##** you previously created to the daily work schedule.

Continued on next page

2. Define the daily work schedule **LA## (Late ##)**. Copy the daily work schedule **S-11**. Choose the grouping for daily work schedules **01**. Work starts at **2:00 p.m.** (14:00), with a planned working time of 7.75 industry hours (7 hours 45 minutes). Assign the break schedule **PW##** you previously created to the daily work schedule.

   a) Select and copy the entry **S-11** and name it **LA## (Late ##)**. Use the personnel subarea grouping for daily work schedules **01**. Modify the planned working time as follows:

      Planned working hours: 7.75 industry hours (7 hours 45 minutes)

      Start of planned working time: **2:00 p.m.** (14:00)

      Assign the break schedule **PW##** you previously created to the daily work schedule.

3. Define the daily work schedule **NT## (Night ##)**. Copy the daily work schedule **N-11**. Choose the grouping for daily work schedules **01**. Work starts at **10:30 p.m.** (22:30), with a planned working time of 6.25 industry hours (6 hours 15 minutes). Assign the break schedule **PW##** you previously created to the daily work schedule.

   a) Select and copy the entry **N-11** and name it **NT## (Night ##)**. Use the personnel subarea grouping for daily work schedules **01**. Modify the planned working time as follows:

      Planned working hours: 6.25 industry hours (6 hours 15 minutes)

      Start of planned working time: **10:30 p.m.** (22:30)

      Assign the break schedule **PW##** you previously created to the daily work schedule.

Task 5:

Define a period work schedule

1. Group the daily work schedules **EA##, LA##, NT##**, and **OFF** into one period work schedule called **WP##**. The work pattern repeats itself every three weeks. You can simply copy three weeks of an existing period work schedule. Choose the grouping for daily work schedules **01**.

   a) Choose ***Personnel Time Management → Work Schedules → Period Work Schedules → Define Period Work Schedules***.

      Select and copy one of the existing period work schedules. Name your new period work schedule **WP##** (## = your group number) and enter a description of your choice. Because the work pattern repeats itself every three weeks, copy three lines. Use the personnel subarea grouping for daily work schedules **01**.

Continued on next page

2. Enter the following data for each week:

   Week 1: Employees work from Day 1 to Day 5 according to the daily work schedule **EA##**; Day 6 and Day 7 are days off.

   Week 2: Employees work from Day 1 to Day 5 according to the daily work schedule **LA##**; Day 6 and Day 7 are days off.

   Week 3: Employees work from Day 1 to Day 4 according to the daily work schedule **NT##**; and Day 5, Day 6, and Day 7 are days off.

   a) For days **01** to **05** of Week 1, enter the daily work schedule **EA##**, and the daily work schedule **OFF** for days **06** and **07**.

      For days **01** to **05** of Week 2, enter the daily work schedule **LA##**, and the daily work schedule **OFF** for days **06** and **07**.

      For days **01** to **05** of Week 3, enter the daily work schedule **NT##**, and the daily work schedule **OFF** for days **06** and **07**.

Task 6:

Check selection rule for day types

1. Your employees are required to work on public holidays. Check the selection rule **02**. This rule will be referenced later in the work schedule rule.

   a) Choose ***Personnel Time Management → Work Schedules → Day Types → Define Selection Rules***.

      Check the selection rule **02**. It will be referenced again in the work schedule rule. Your employees must also work on public holidays.

Rule		Weekday	Saturday	Sunday
	With holiday class	b123456789	b123456789	b123456789
02	Gives day type			

Task 7:

Define the work schedule rule AW##

1. In the Implementation Guide, choose ***Personnel Time Management → Work Schedules → Work Schedule Rules and Work Schedules***.

   a) Choose ***Personnel Time Management → Work Schedules → Work Schedule Rules and Work Schedules***.

2. Check employee subgroup grouping

Continued on next page

Check the employee subgroup grouping. Make sure that an employee subgroup grouping already exists for your hourly-wage earners.

a) Choose ***Personnel Time Management → Work Schedules →Work Schedule Rules and Work Schedules → Define Employee Subgroup Groupings***.

Choose **→*Define Employee Subgroup Groupings***. Check whether an employee subgroup grouping for the work schedule already exists for hourly-wage earners.

Choose **→*Group Employee Subgroups for Work Schedules***. Check whether the above employee subgroup grouping is already assigned to your employee subgroup *Hourly wage earners* (X1) for work schedules.

3. Check public holiday calendar

Check the public holiday calendar assigned to the personnel subarea **TP## Production** ##.

a) Choose ***Personnel Time Management → Work Schedules →Work Schedule Rules and Work Schedules → Groupings for the Public Holiday Calendar***.

Check whether a public holiday calendar is already assigned to your personnel subarea **TP##**. Use the following public holiday calendar:

99

4. Define a work schedule rule

Define the work schedule rule **AW##**. Copy the work schedule rule **M3-1**. Use the employee subgroup grouping *Hourly-wage earners* and the public holiday calendar assigned to your personnel subarea **TP##**, as well as the personnel subarea grouping for work schedules **01**.

Copy the rule for day types **02**.

Continued on next page

Use your period work schedule **WP##** and check the reference date and starting point.

a) Choose ***Personnel Time Management → Work Schedules → Work Schedule Rules and Work Schedules → Set Work Schedule Rules and Work Schedules***.

Select and copy an existing entry for hourly-wage earners. Using the employee subgroup grouping 1, the public holiday calendar assigned to your personnel subarea, and the personnel subarea grouping for work schedule 01. Use *AW##* (## = your group number) for the work schedule rule and enter an appropriate name.

Note:

If the work schedule you have copied has any entry in the *Alternative work schedule rule* field in the *Reduced work* area, delete this entry before saving your work schedule rule.

b) Copy the rule for day types **02**.

c) Use the period work schedule **WP##** and enter it in the corresponding field. Choose **January 1, 1990**, as the reference date (or another Monday), and **001** as the starting point. Enter the data in the appropriate fields. Save your entries.

Continued on next page

Task 8:

Generate work schedule for rotating shift

1. Generate the work schedule **AW##** for a period of three years. As a start date, choose the December of the previous year, and as an end date the January of the current year plus 3.

   a) Generate work schedule **AW##** for rotating shift

      Choose ***Personnel Time Management → Work Schedules → Work Schedule Rules and Work Schedules → Generate Work Schedules Manually***.

      Enter the following values in the entry screen for the work schedule:

Employee subgroup grouping	1
Public holiday calendar	Public holiday calendar for your personnel subarea (99)
Personnel subarea grouping	01
Work schedule rule	AW##
Calendar month from	December of previous year (in number format)
Calendar month to	January (of current year + 3) (in number format)

      Note:

      The instructor may announce a different generation period

      Choose the *Create all* option, or choose ***Edit → Create all*** from the menu.

Continued on next page

Task 9:

Assign work schedule

1. Assign the generated work schedule to your hourly-wage earner in the *Planned Working Time* infotype, starting the first of this month.

   a) Open a new session (choose ***System → Create session***) and then choose from the menu: ***Human Resources → Time Management → Administration → Time Data → Maintain***.

      For your hourly-wage earner with the personnel number **306991##**, complete the following steps: Enter **Planned Working Time** (0007) in the *Infotype* field.

      Choose *Create* or *Edit → Create* from the menu. Enter the first of the current month as the valid from date.

      Enter the work schedule rule **AW##**.

      Choose *Enter* to confirm the warning that appears and then save your entries.

Lesson Summary

You should now be able to:

- Set up the individual elements of work schedules
- Generate and assign a work schedule

Unit Summary

You should now be able to:

- Describe the characteristics of public holidays
- Describe the structure of the public holiday calendar
- Understand the relevance of public holidays for payment and attendance/absence counting
- Set up the individual elements of work schedules
- Generate and assign a work schedule

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Test Your Knowledge

1. The public holiday calendar that is valid for an employee depends upon the personnel area/subarea to which the employee is assigned.

   Determine whether this statement is true or false.

   □ True

   □ False

2. A work schedule in the SAP system contains the following elements:

   Choose the correct answer(s).

   □ A Weekly schedule

   □ B Break schedule

   □ C Work schedule rule

   □ D Daily work schedule

   □ E Night work schedule

   □ F Period work schedule

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Answers

1. The public holiday calendar that is valid for an employee depends upon the personnel area/subarea to which the employee is assigned.

   Answer: True

   A public holiday calendar has to be assigned in Customizing to each personnel area/personnel subarea. In master data maintenance, each employee is assigned to a personnel area/personnel subarea, which thereby assigns him or her to a public holiday calendar.

2. A work schedule in the SAP system contains the following elements:

   Answer: B, C, D, F

   A work schedule is made up of break schedules, daily work schedules and period work schedules, which are consolidated in a work schedule rule.

Unit 26

701

Part-Time Workforce

For more information, see the Instructor Guide in SAPNet.

Unit Overview

In this unit, you learn about the options available for creating part-time work models.

Unit Objectives

After completing this unit, you will be able to:

- Create and assign part-time work schedules

Unit Contents

Lesson: Part-Time Workforce and Working Time Models

702

Lesson Duration: 15 Minutes

Lesson Overview

In this lesson, you learn how to represent part-time models in the system.

Lesson Objectives

After completing this lesson, you will be able to:

- Create and assign part-time work schedules

For more information, see the Instructor Guide in SAPNet.

Business Example

- Your company employs part-time workers as well as full-time employees.
- In this lesson, you will learn about two options available for creating part-time work models.

Part-Time Workforce and Working Time Models

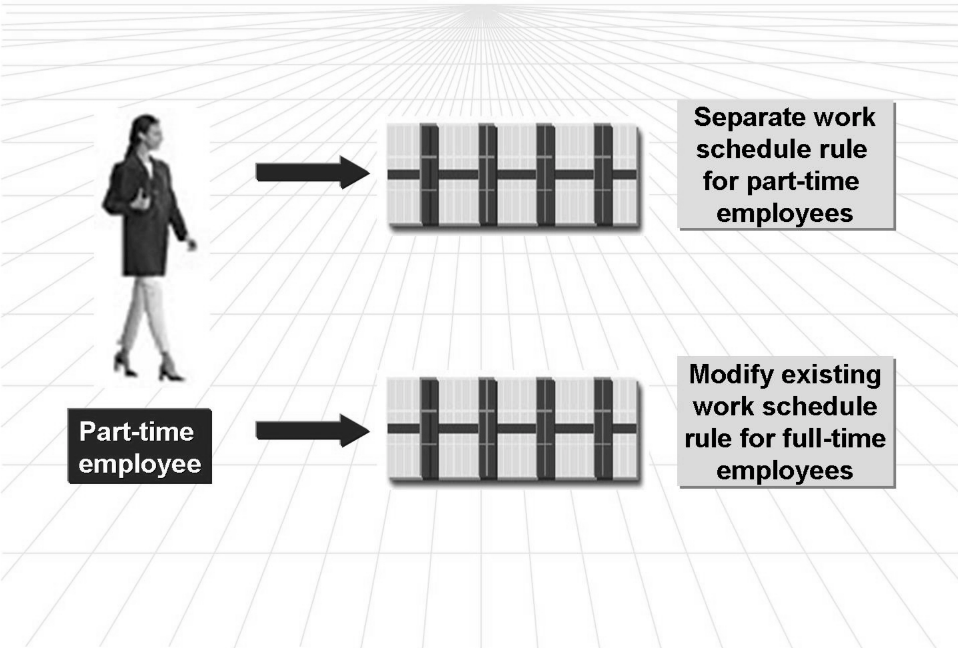

Figure 403: Part-Time Workforce: Planned Working Time

Companies frequently employ part-time employees. Numerous part-time working schedules exist, and they vary widely according to enterprise and industry.

Part-time working provisions can be set up in the SAP system in two different ways.

You can set up your own work schedule rules for your part-time employees, or you can use the work schedule rules that exist for your full-time workforce.

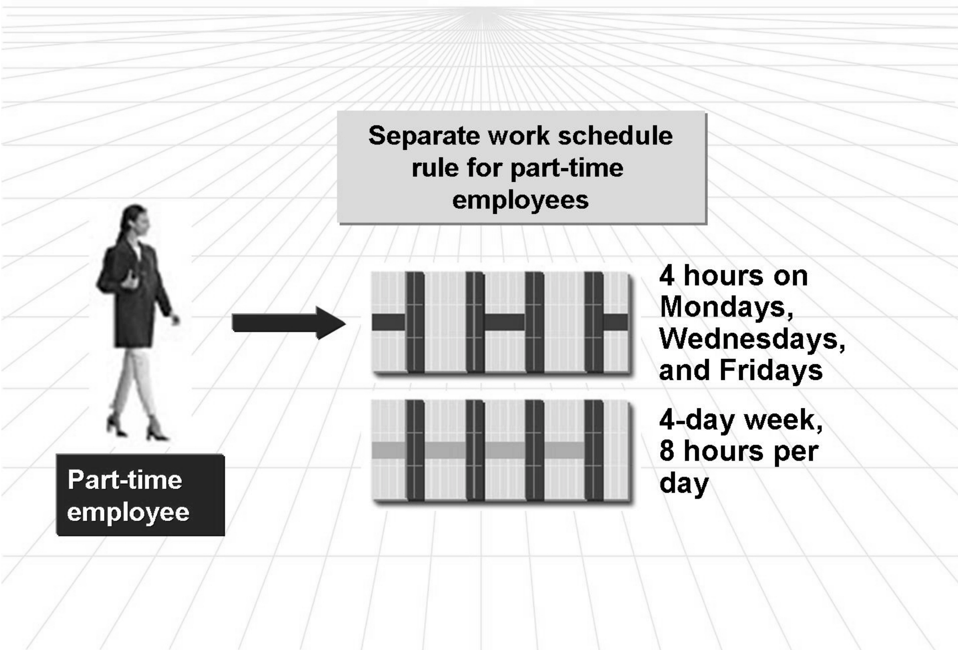

Figure 404: Part-Time Work Schedule: Separate Work Schedule Rules

If you want to create a separate work schedule rule for a part-time employee, you proceed exactly as you did for creating work schedule rules for your full-time employees. A work schedule rule for your part-time workforce can be used for all employees who are to work according to this rule.

This means that you must follow all of the required steps, such as setting up daily work schedules, period work schedules, work schedule rules, and so on in the Implementation Guide (IMG). In addition, you have to generate a work schedule from these elements and then assign it to your part-time employees in the *Planned Working Time* infotype (0007).

You can define the shortened working time in the daily work schedule by specifying fewer planned working hours (4 instead of 8, for example).

Alternatively, you may have employees who have the same daily work schedules as your full-time employees. However, they work fewer days in the week. You can then group the daily work schedules into an applicable period work schedule (3-day working week instead of 5, for example).

Both part-time scenarios can also be combined. It is possible that part-time employees work fewer hours each day and fewer days as full-time employees.

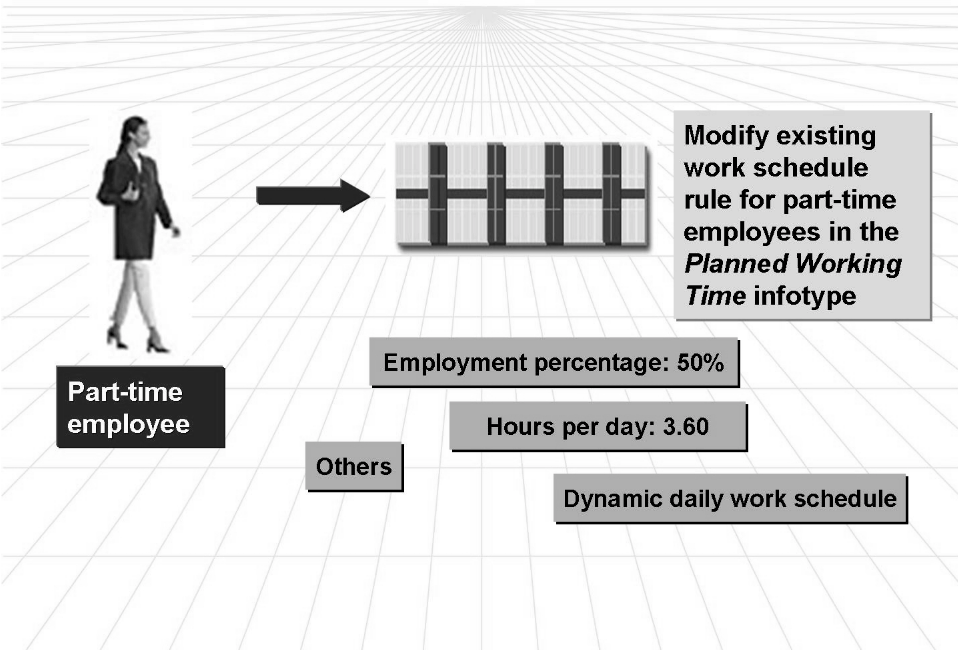

Figure 405: Part-Time Work Schedule: Modifying Infotype 0007

If you want to specify a part-time rule based on a full-time work schedule rule, you have to modify the average working hours in the existing daily work schedule in the *Planned Working Time* infotype (0007) for each applicable employee.

To do so, you can set the employment percentage, the working hours per day, week, month, or year to a lower value. Using the function for creating daily work schedules dynamically, you are able to specify variable working times for part-time employees in your enterprise.

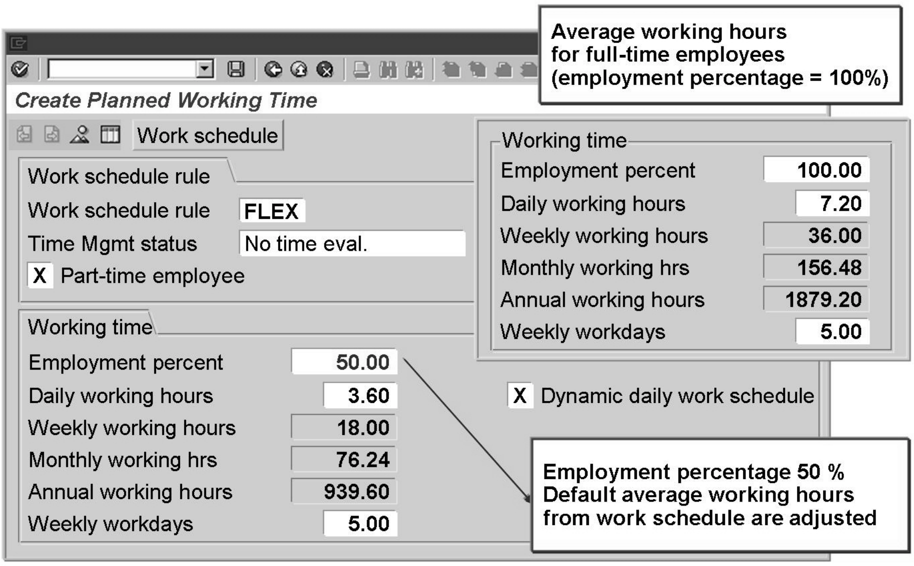

Figure 406: Part-Time Work Schedule: Modifying Infotype 0007 (cont'd)

If you want to specify a part-time rule based on a full-time work schedule rule, you must do so for each employee individually. To do so, you change the average working hours of the full-time work schedule rule in the *Planned Working Time* infotype (0007) in one of the fields in the *Working time* section of the screen. Note: You can customize which of the hours fields are ready for input. In the standard system, only the daily working hours field is active.

The fields that you can overwrite are: employment percentage, daily working hours, weekly working hours, monthly working hours, and annual working hours. You only have to overwrite one field and the others are automatically adjusted.

As soon as the employment percentage is less than 100%, the *Part-time employee* field becomes activated. Furthermore, the personal work schedule for the employee is modified accordingly to reflect the part-time working hours.

Part-time work can also be specified in the *Planned Working Time* infotype (0007) using the dynamic daily work schedule function. In this way, you can overwrite specific fields of the daily work schedule for part-time employees according to the specifications in the *Planned Working Time* infotype (0007).

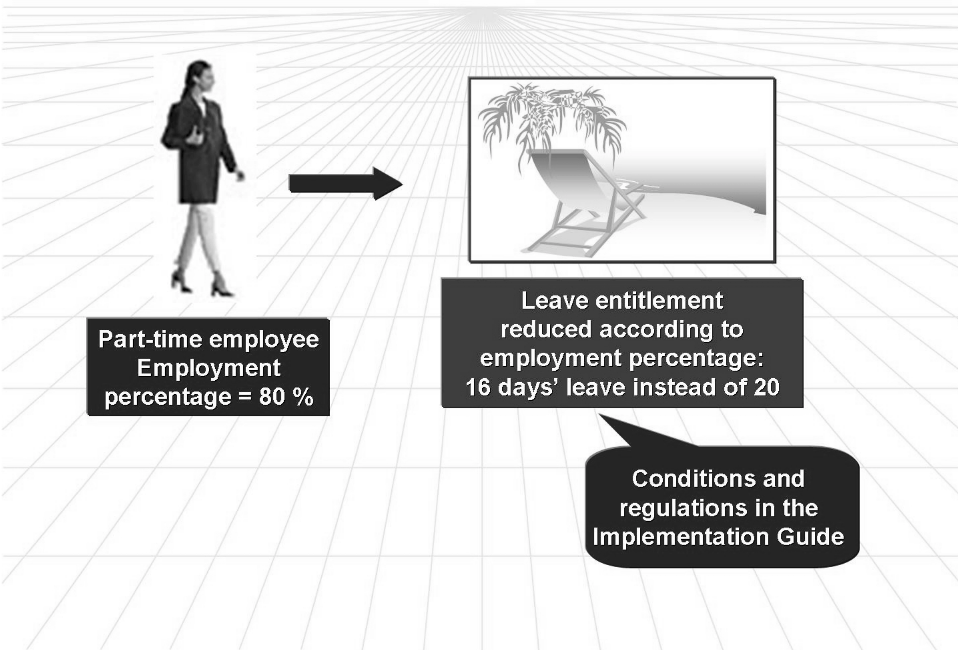

Figure 407: Part-Time Workforce: Modifying Leave

If quota entitlements such as leave also need to be reduced for part-time employees, you can also create the required reduction rules with the necessary conditions in the IMG.

You can modify the leave entitlement according to the employment percentage for your part-time employees in the *Planned Working Time* infotype (0007). Another option would be to modify the capacity utilization level in the *Basic Pay* infotype (0008) or weekly workdays, for example.

707 Exercise 34: Set Up Part-Time Work Models

Exercise Duration: 30 Minutes

Exercise Objectives

After completing this exercise, you will be able to:

- Set up an individual part-time work schedule

Business Example

Some employees at the your company work part-time. For many of these part-time employees, the part-time work schedule is set up individually by modifying the existing work schedule rule.

Task:

Set up an individual part-time work schedule for an employee

1. Modify the working time in the *Planned Working Time* infotype (0007) for your hourly-wage earner starting the first of the month after next, so that he has a part-time employment percentage of **50%**.

Solution 34: Set Up Part-Time Work Models

Task:

Set up an individual part-time work schedule for an employee

1. Modify the working time in the *Planned Working Time* infotype (0007) for your hourly-wage earner starting the first of the month after next, so that he has a part-time employment percentage of **50%**.

   a) Choose *Human Resources →Time Management → Administration → Time Data → Maintain*.

      Enter the personnel number of your hourly-wage earner ***306991##*** (## = your group number) and then call up the *Planned Working Time infotype* (0007). Choose the *Create* button, or *Edit → Create* from the menu.

      In the subsequent screen, enter the first day of the month after next as the start date.

      In the *Employment percent* field, enter **50%** and confirm the subsequent warnings by choosing *Enter*.

      The ***Part-time*** and ***Dynamic daily work schedule*** options are automatically set. Check how the employee's working times have changed.

      Save your data.

Lesson Summary

You should now be able to:

- Create and assign part-time work schedules

Unit Summary

You should now be able to:

- Create and assign part-time work schedules

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Test Your Knowledge

1. A separate work schedule rule must be entered for each part-time model.

   Determine whether this statement is true or false.

   □ True

   □ False

712

Answers

1. A separate work schedule rule must be entered for each part-time model.

   Answer: False

   You can represent part-time models based on a full-time work schedule rule by adjusting the employment percentage in the *Planned Working Time* infotype (0007).

Unit 27

713

Time Data Recording and Administration

For more information, see the Instructor Guide in SAPNet.

Unit Overview

In this unit, you learn how to configure time data recording and specify how you want the system to react when time infotypes collide.

Unit Objectives

After completing this unit, you will be able to:

- Customize time recording and administration
- Determine how the system reacts to collisions between time infotypes

Unit Contents

Lesson: Time Data Recording and Administration

714

Lesson Duration: 85 Minutes

Lesson Overview

In this lesson, you customize time data administration and collision checks.

Lesson Objectives

After completing this lesson, you will be able to:

- Customize time recording and administration
- Determine how the system reacts to collisions between time infotypes

For more information, see the Instructor Guide in SAPNet.

Business Example

- Employees at your enterprise work according to the times specified in their work schedules. However, deviations can occur. Employees call in sick, go on vacations, fill in for other employees, work overtime, and so on.
- To record these deviations in the system and to deduct them from the applicable entitlements, you have to make specific Customizing settings.

Overview

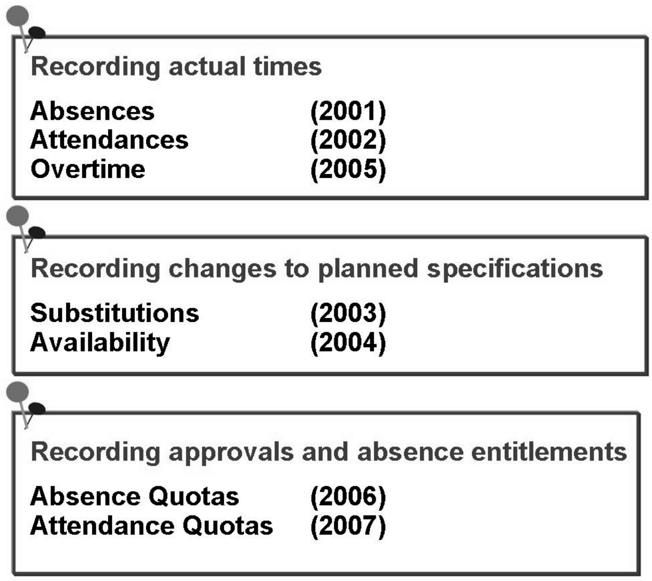

Figure 408: Overview of Time Infotypes

Planned specifications for an employee's working time are stored in the *Planned Working Time* infotype (0007). However, there are often changes to the specified working times, for example, if an employee works overtime, does not come to work (due to illness, for example), attends a seminar, or works different times than usual. In addition, employees are entitled to vacation and possibly further training.

This and other information is stored in infotypes in Time Management. The information from these time infotypes can be transferred and processed further in time evaluation and payroll, as required.

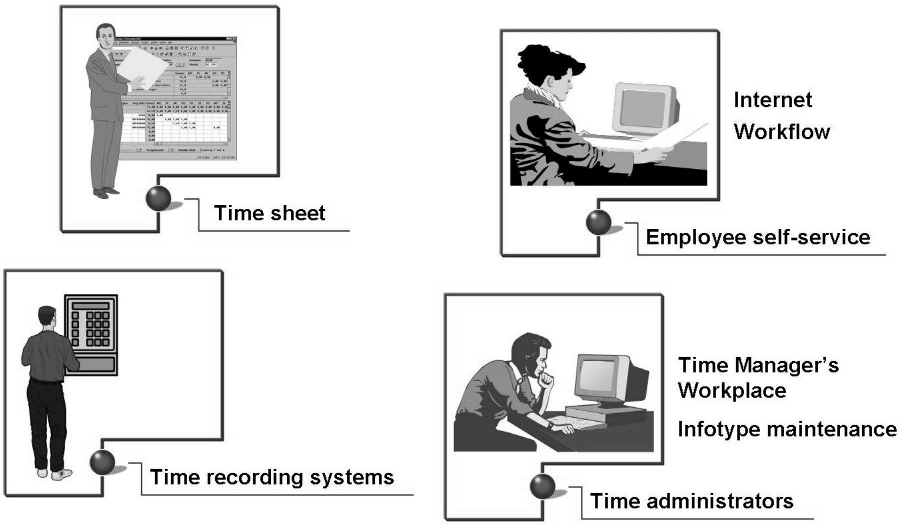

Figure 409: Time Recording Options

With SAP Time Management, you can use various systems and methods for recording time and labor data, such as actual times worked, business trips, leave, or substitutions:

Online entry by time administrators

Front-end time recording systems

SAP Cross-Application Time Sheet

Self-service applications such as Internet applications, Workflow forms, or touch-screen systems

Customer-specific systems with an interface to SAP R/3

Time data is stored in time infotypes. Time administrators can use various options to record time data:

The *Time Manager's Workplace* (TMW) was developed specifically for decentralized time administrators; it provides a user interface to optimize the recording and maintaining of time data for these administrators. Time data is entered using intuitive time data IDs, but is still stored in the applicable time infotypes.

The following entry options are available if you maintain time data directly in the infotypes: **single screen**, in which you maintain one infotype record for one employee; **fast entry**, in which you maintain one infotype record for several employees at one time; and **list entry**, in which you maintain several infotype records for one employee.

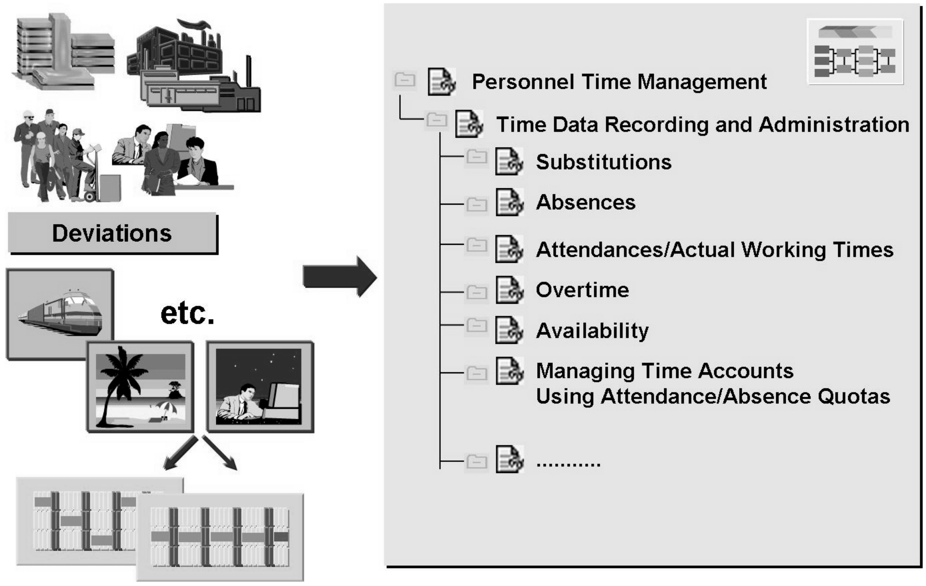

Figure 410: Setting Up Deviations in Time Recording

To ensure that various deviations in working time are efficiently recorded at the your company, you must first check the corresponding settings in the Implementation Guide (IMG) and modify them, if necessary.

To set up deviations, complete the Customizing steps in the *Time Data Recording and Administration* section of the IMG for Personnel Time Management.

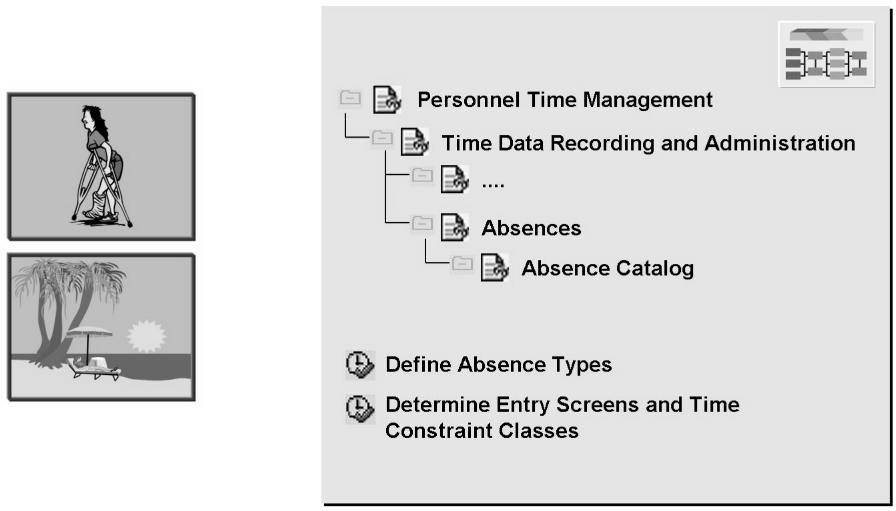

Figure 411: Setting Up Absences

The Implementation Guide (IMG) contains samples of absence types.

To set up absence types, complete the Customizing steps under *Personnel Time Management → Time Data Recording and Administration → Absences*.

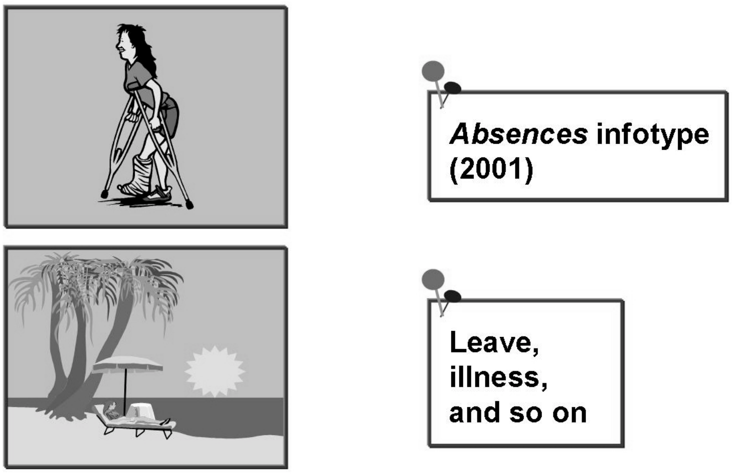

Figure 412: Absences

Absences (such as leave or illness) can be classified as paid or unpaid.

Absences are recorded in the *Absences* infotype (2001) and are defined further by an absence type (subtype).

The IMG contains an absence catalog with samples that you can copy and modify for your own use.

Absence types are dependent upon the personnel subarea grouping for attendances and absences. You need several groupings only if you use different attendance and/or absence types for different personnel subareas and you want to restrict their use in different personnel subareas.

Furthermore, you can determine which input checks the system carries out when an absence is recorded. These include system reactions on days off, as well as the limiting of absences to a certain number of days or only part of a day.

Because the individual absence types contain different types of information, the system uses a separate entry screen to record each absence in the *Absences* infotype (2001).

Each absence type is assigned a time constraint class that is referenced during the collision check for existing time types.

Absences are counted using counting rules, and valuated in payroll or time evaluation.

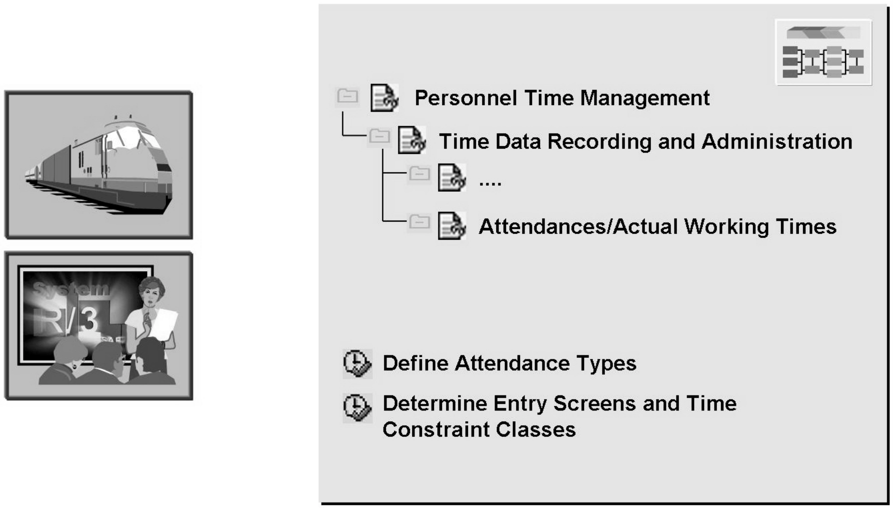

Figure 413: Setting Up Attendances

The IMG contains samples of attendance types.

To set up attendance types, complete the Customizing steps under *Personnel Time Management → Time Data Recording and Administration → Attendances*.

Attendance types are created in the same way as absence types.

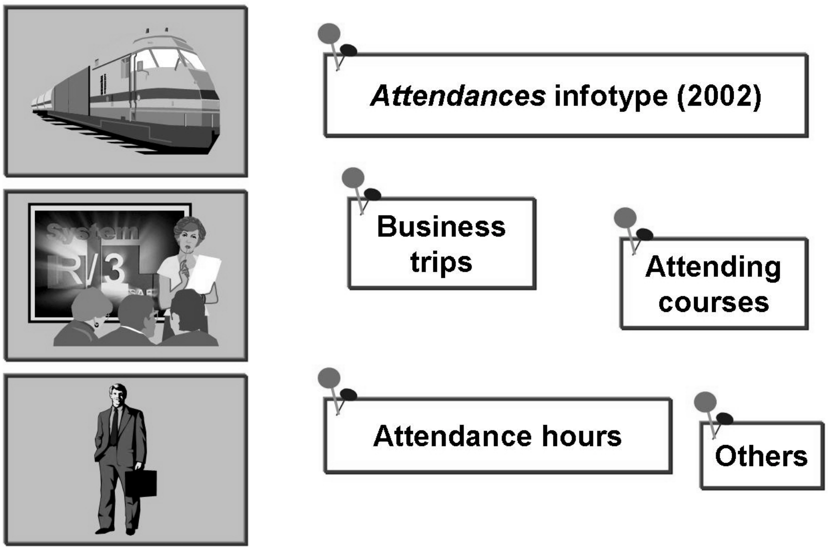

Figure 414: Attendances

Attendances recorded in the *Attendances* infotype (2002) describe the employee's work schedule or provide additional information. Using this infotype, you can store an employee's working hours, attendance at training courses, and overtime, for example. If you do not use time recording systems in your enterprise, you can use it to record employees' actual times.

You can assign the attendances recorded in this infotype to a cost center that differs from the master cost center.

Another example of an attendance is a business trip. The employee is not working at the usual workplace, but he or she is still working for the company during the trip.

Attendances are recorded in the *Attendances* infotype (2002) and are defined further by an attendance type (subtype).

Note:

Attendances are set up in the Implementation Guide in the same way as absences.

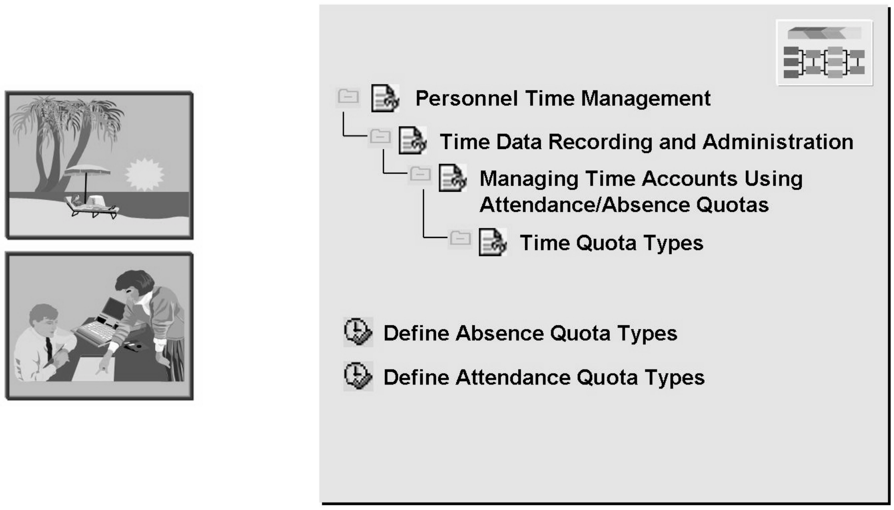

Figure 415: Creating Attendance/Absence Quotas

The IMG contains samples of absence and attendance quotas.

The corresponding Customizing steps for setting up attendance and absence quotas are located in the IMG for Personnel Time Management under *Time Data Recording and Administration → Managing Time Accounts Using Attendance/Absence Quotas → Time Quota Types*. For absence quotas, select the *Define Absence Quota Types* activity and for attendance quotas the *Define Attendance Quota Types* activity.

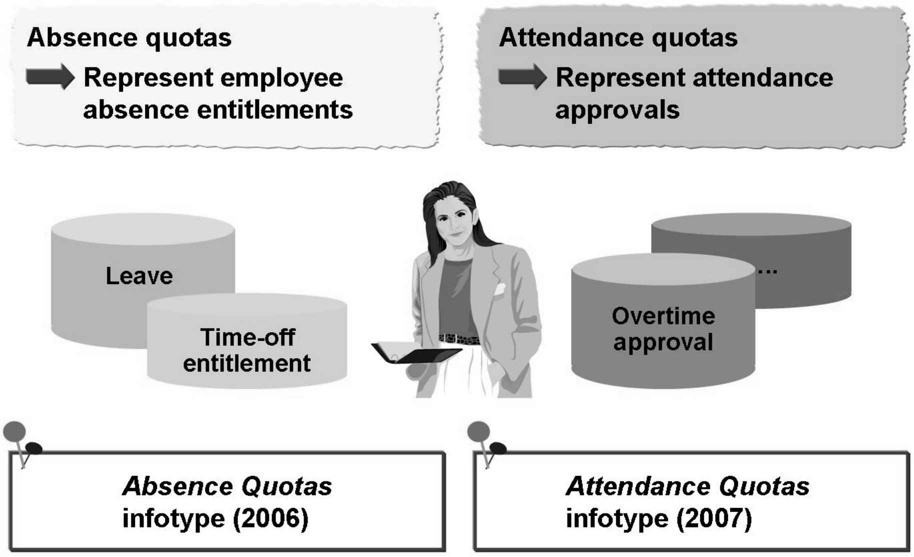

Figure 416: Attendance and Absence Quotas

Employees in your enterprise are entitled to leave, additional training, and so on. These types of entitlements can be stored in quotas, from which attendances and absences are deducted.

You set up employees' absence entitlements, such as standard annual leave, educational leave, and non-working shift entitlement, in the *Absence Quotas* infotype (2006) .

You set up approvals for special attendances (such as overtime approvals) in the *Attendance Quotas* infotype (2007). These approvals can be queried in time evaluation.

An absence quota is an employee's time-limited entitlement to an absence. Similarly, an attendance quota is an employee's time-limited entitlement to an attendance. Attendance quota types and absence quota types are used to represent these entitlements in the system.

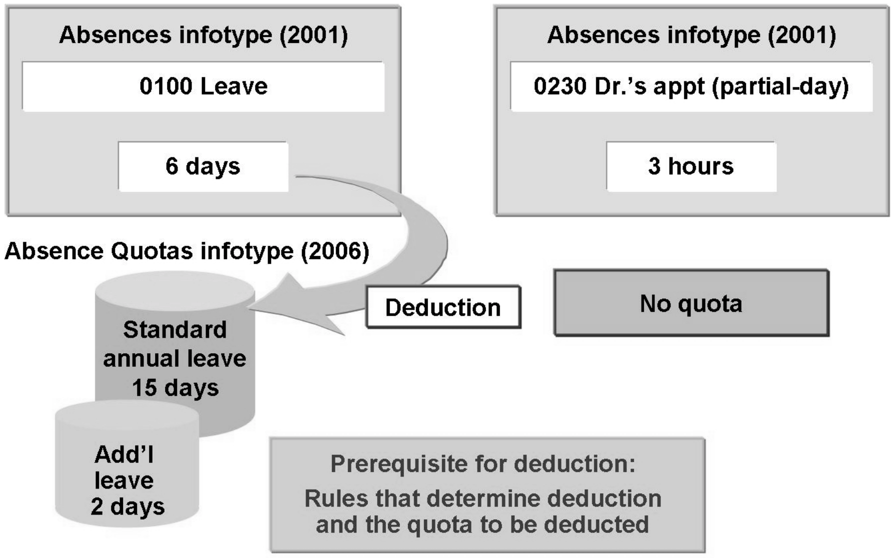

Figure 417: Absence Quotas

Attendances and absences can be deducted from quotas, but do not have to be.

If attendances and absences are deducted from quotas, you must specify from which quotas and in which sequence.

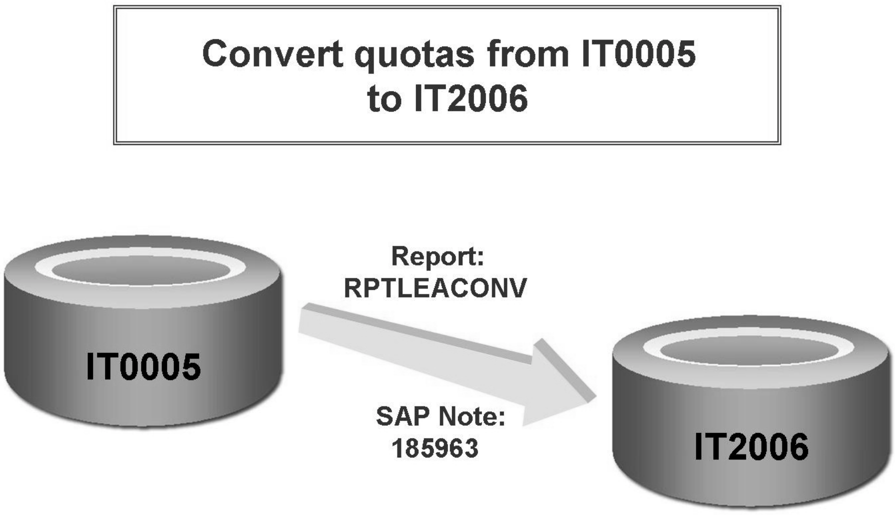

Figure 418: Converting Absence Quotas

You can currently manage your employee's leave entitlements using the *Leave Entitlement* infotype (0005) or the *Absence Quotas* infotype (2006).

The *Absence Quotas* infotype (2006) offers more functions and flexibility for accruing, managing, and deducting from leave entitlements compared with the *Leave Entitlement* infotype (0005).

To simplify the conversion to quotas, you can use the RPTLEACONV report, which enables you to transfer your employees' remaining leave from the *Leave Entitlement* infotype (0005) to absence quotas in the *Absence Quotas* infotype (2006).

To do so, you enter in table T559J (Convert Leave Types to Quota Types) which leave types you want to transfer to which absence quota types, taking into account the applicable employee subgroup groupings and personnel subarea groupings.

You maintain table T559J via the V_T559J view.

We recommend that you use absence quotas to manage your employees' leave entitlements in the future, because although the *Leave Entitlement* infotype (0005) remains available, it will not be developed further.

The RPTLEACONV report was shipped via Support Packages as of Release 4.5B. For detailed documentation, access the report in the transaction SA38 and choose *Goto → Documentation*.

For related SAP Notes, see: 366686, 312911, 381856

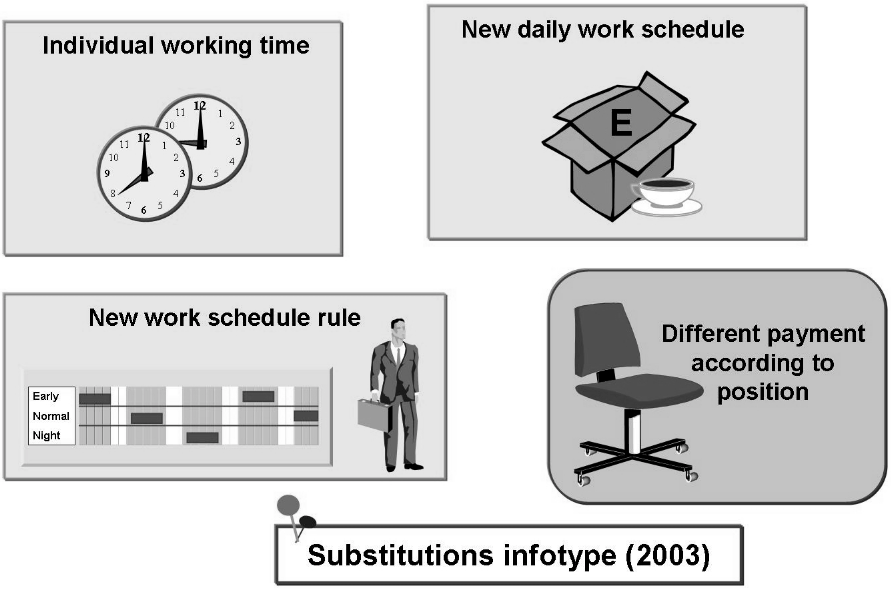

Figure 419: Substitutions

A substitution occurs when an employee has to carry out activities that require a different working time or payment from that stipulated in his or her work schedule. Substitutions are recorded in the *Substitutions* infotype (2003). The following substitution types are conceivable:

Individual working time: This substitution is recommended for changes to planned working time that cannot be represented in daily work schedules or work schedules. You enter clock times to indicate the start and end of working time. The original planned working time is overwritten.

New daily work schedule: This substitution is recommended for daily changes to planned working time. It replaces the employee's original planned working time.

New work schedule rule: This substitution is recommended for longer-term changes to planned working time. Here you can also assign the work schedule rule of an employee to be substituted by entering his or her personnel number. The system then applies the work schedule of the other employee. The original planned working time is overwritten.

Different payment: This substitution permits a different payment by substituting a different position that has different pay. The planned working time is not overwritten here, unless you combine this substitution with one of the other substitutions.

You can record a different payment (premium, different pay scale group, and so on) for a substitution. You can also assign the substitution either to a cost center that deviates from the master cost center or an order.

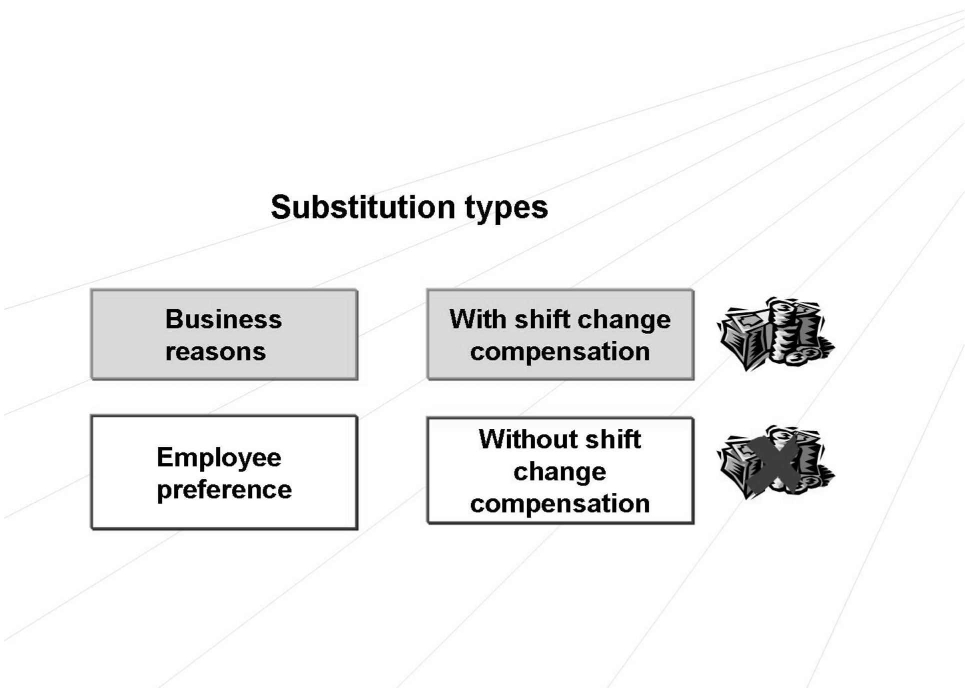

Figure 420: Substitutions: Leveling By Substitution Type

You can set up various types of substitutions (foreman substitutions, shift substitutions, and so on).

Substitution types can also be used for different payments. Depending on the substitution type, you can determine if a bonus or other type of compensation applies.

The following are examples of the different uses for various substitution types:

Substitution type **01 = Employee preference** (employee voluntarily substitutes for a night shift)

Substitution type **02 = Business reason** (employee is assigned this substitution)

Shift change compensation can be set up to be paid only for business reasons (substitution type 02).

When setting up the substitution type in the IMG, you can specify if compensation for a shift change is usually paid or not.

This can also be queried in schema XT00 in payroll.

Note:

Note: You can use the **VTART** feature to define a default substitution type.

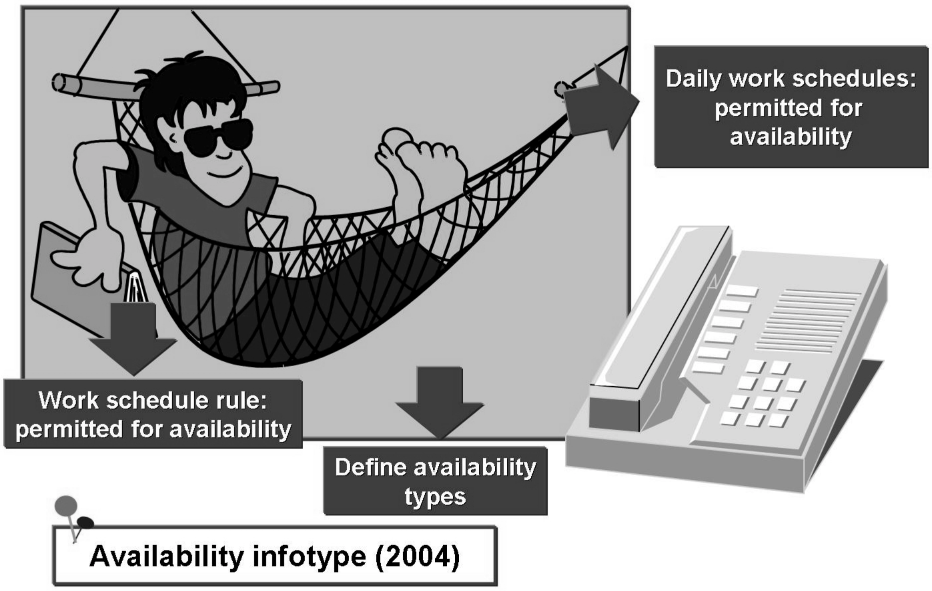

Figure 421: Availability

Availabilities are stored in the *Availability* infotype (2004). Various types of availability can be maintained. They take place in fixed periods.

Availability can be specified by clock times, a daily work schedule, or a work schedule rule. The daily work schedule and the work schedule rule must be permitted for use in availabilities.

Before setting up availabilities, you must first set up the assignment of groupings for availability types (and substitution types) for the personnel areas/subareas.

The standard system uses only grouping **01**.

Additional groupings are required only if different availability types (and substitution types) are used in several different personnel areas/subareas.

Example:

The personnel subareas **0001** and **0002** use the same availability types. The personnel subarea **0003**, on the other hand, uses different availability types.

You must then define the availability types required for these groupings in your enterprise. The time constraint class for collisions with other time infotypes must be checked.

Finally, the daily work schedules and work schedule rules permitted for availabilities must be indicated.

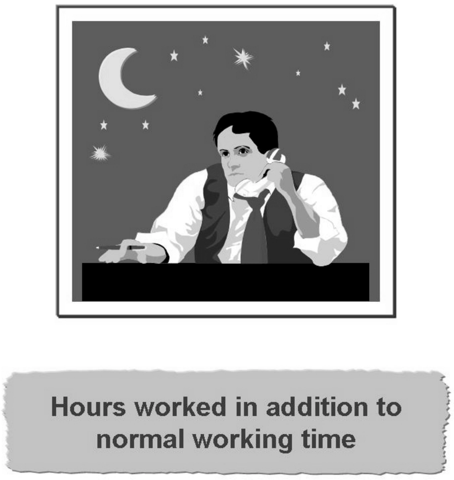

Figure 422: Overtime

Overtime is hours that an employee works in addition to the planned working time defined in his or her daily work schedule. Overtime can be recorded using the *Attendances* infotype (2002) or *Overtime* infotype (2005) if you only want to record deviations to the work schedule.

You use the overtime compensation type to determine whether the overtime is paid, or compensated by time off. The overtime compensation types are located in the *Attendances* infotype (2002) and the *Overtime* infotype (2005). You can record a different payment (premium, different pay scale group, and so on) for the overtime entered. You can also assign the overtime to a cost center that deviates from the master cost center or an order. You can only enter activity allocation data in the *Attendances* infotype (2002).

Note: The *Overtime* infotype is not available in the Time Manager's Workplace.

If you use time evaluation in your enterprise, overtime is automatically calculated from the complete actual times. In time evaluation, you can process various forms of overtime determination (daily, weekly), and approval (for specific employees, according to work schedules, general).

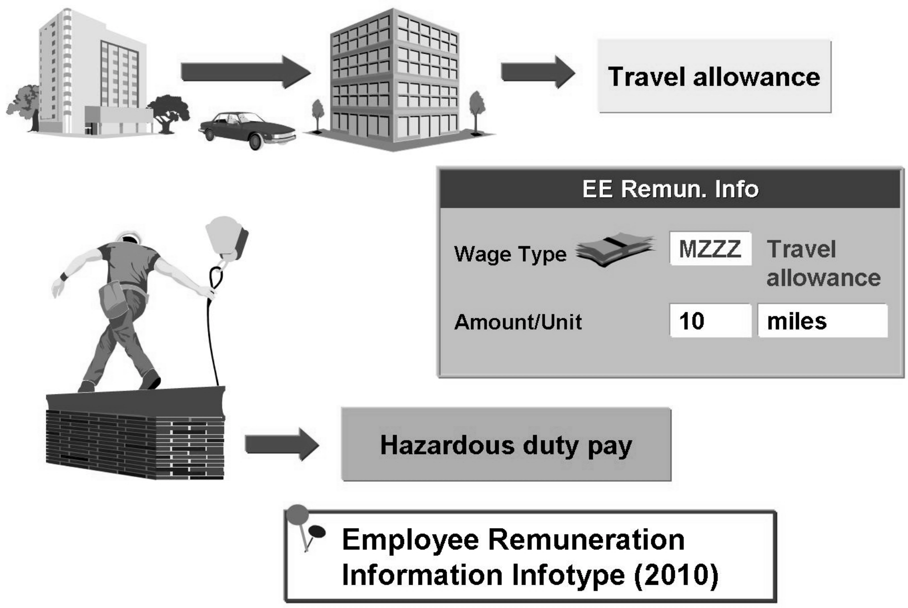

Figure 423: EE remun. info

You can use the *Employee Remuneration Information* infotype (2010) to store manually calculated wage amounts, hazardous duty payments, and other wage types that cannot be planned. These wage types cannot be automatically generated in payroll and must therefore be recorded manually. Values determined in the remuneration information are transferred directly to payroll.

The *EE Remuneration Info* infotype (2010) relates to a key date, that is, a validity date, not a validity interval. If the key date is within a certain payroll period, remuneration takes place in this same period.

The wage types used for employee remuneration information are located in the IMG and can be customized to suit your requirements.

Example:

An employee must drive from one plant location to another with his or her own private car. The employee is therefore entitled to a travel allowance. You can enter the allowance in the *EE Remuneration Info* infotype (2010) and assign it an appropriate wage type.

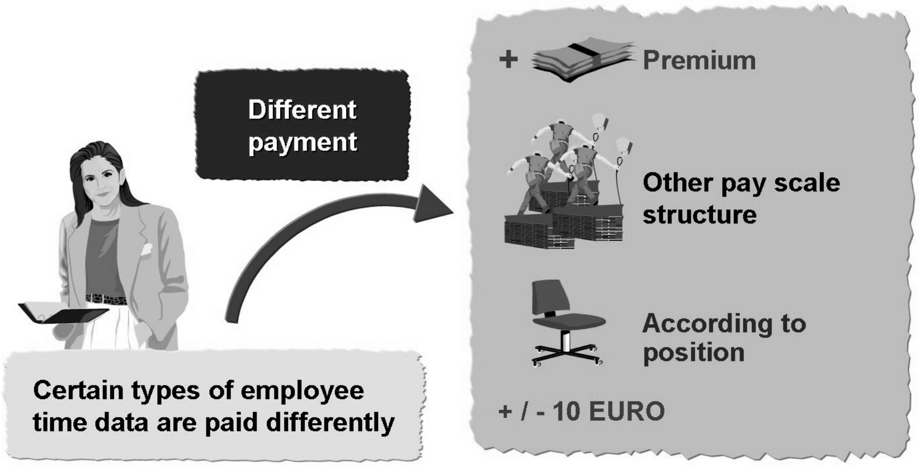

Figure 424: Different payment

You can record different compensation for certain employee time data.

When you record time data (such as attendances, overtime, absences, and availability), you can enter the following specifications for different payment:

Bonus (premium) as supplemental remuneration

Determine a different compensation using a pay-scale assignment (deviating from the employee's regular pay scale)

Compensation using a position (position-based payment)

Bonus or deduction of concrete amounts using the extra pay indicator and the valuation basis.

You can assign employee time data to a cost center other than the master cost center.

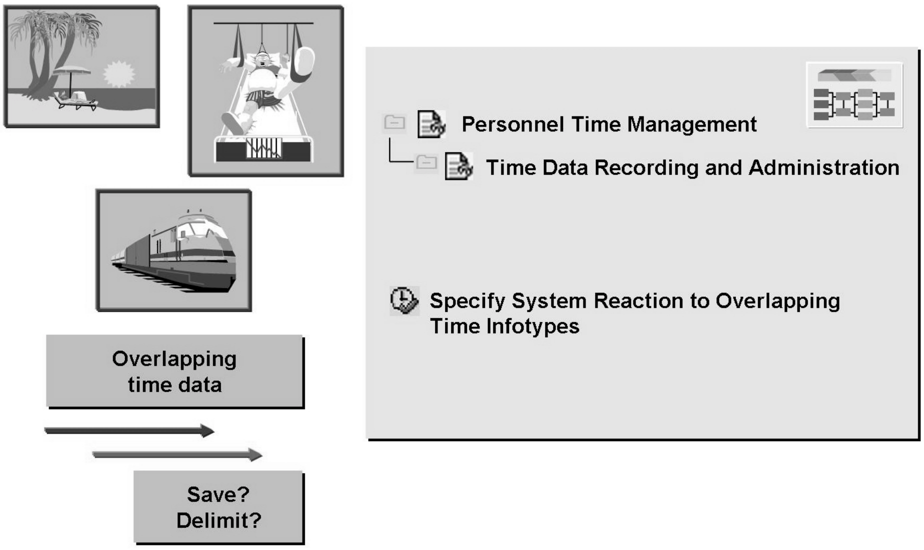

Figure 425: Overlapping Time Infotypes

The system reacts in various ways when time infotypes collide.

These system reactions are controlled by the time constraint class.

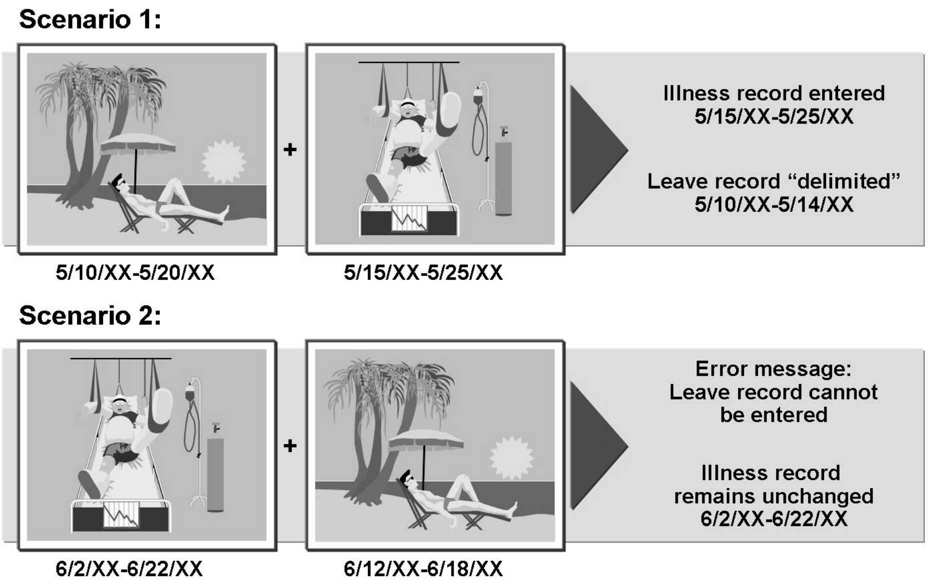

Figure 426: Collision Checks

When time data is recorded, data records frequently overlap one another. These overlaps are called collisions in the SAP R/3 System.

When you enter a new time data record, the system checks whether other records for this employee have been recorded for the same time period. Collision checks prevent data records that conflict with one another from co-existing in the system.

When collisions occur, the system reacts by issuing an error message, a warning, or by delimiting the old record.

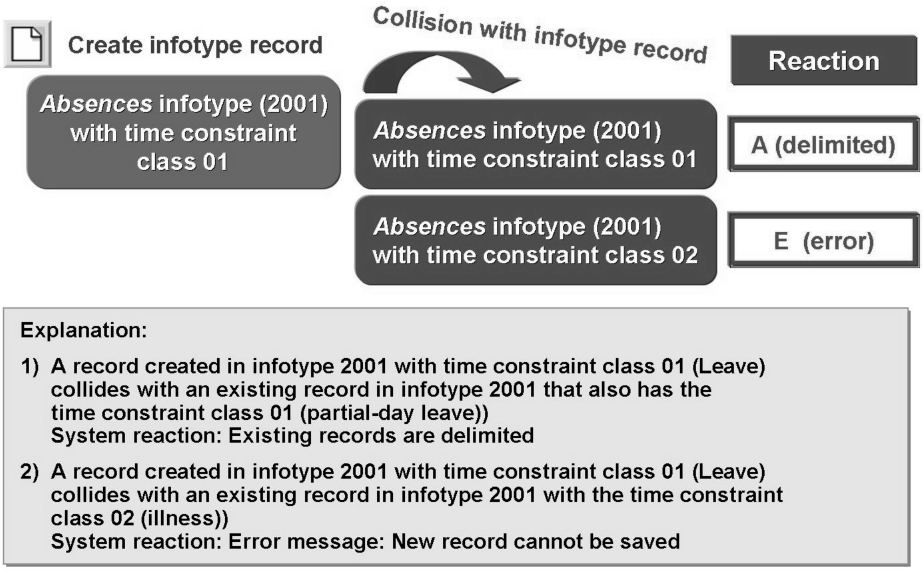

Figure 427: System Reaction to Colliding Time Infotypes

Collision checks reference the time restraint classes of time recording data.

Possible time constraint reactions to collisions when recording an infotype are:

A The existing record is delimited and the new record created.

The system issues a message.

E The new record cannot be added.

The system issues an error message.

W A new record is created; the existing record is not changed.

The system issues a warning message.

N A new record is created; the existing record is not changed.

The system does not issue a warning message.

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Exercise 35: Set Up Attendance and Absence Types

Exercise Duration: 20 Minutes

Exercise Objectives

After completing this exercise, you will be able to:

- Configure absence types

Business Example

You create attendance and absence types for your enterprise by copying and modifying the samples provided in the standard system.

Hint: If the system asks you to enter a country grouping, enter **99 – Rest of world**.

Task:

Configuring Absence Types

1. Check the appropriate groupings.
2. Create the absence type ***LE##*** and call it ***Leave Group ##***. To do so, copy the absence type ***0100 (Leave)***.

   If the start and end of the absence are designated as a non-working period, you want the administrator to receive a warning message. If the entire period is a non-working period, you want the administrator to receive an error message.

   You do not want any restrictions as to the maximum duration for the absence type.

Solution 35: Set Up Attendance and Absence Types

Task:

Configuring Absence Types

1. Check the appropriate groupings.

   a) In the Implementation Guide (IMG), choose *Personnel Time Management → Time Data Recording and Administration → Absences → Absence Catalog → Group Personnel Subareas for Attendances and Absences*.

      Make sure that your personnel subarea ***TP##*** has the personnel subarea grouping ***01***.

2. Create the absence type ***LE##*** and call it ***Leave Group ##***. To do so, copy the absence type ***0100 (Leave)***.

   If the start and end of the absence are designated as a non-working period, you want the administrator to receive a warning message. If the entire period is a non-working period, you want the administrator to receive an error message.

   You do not want any restrictions as to the maximum duration for the absence type.

   a) In the Implementation Guide (IMG), choose *Personnel Time Management → Time Data Recording and Administration → Absences → Absence Catalog → Define Absence Types*.

      Select and copy the absence type ***0100 (Leave)*** for the personnel subarea grouping ***01*** and call it ***LE## Leave group ##*** (where ## = your group number).

      If the start and end of the absence are designated as a non-working period, you want the administrator to receive a warning message. In the ***First day is day off*** and ***Last day is day off*** fields, enter ***W*** for warning.

      If the entire period is a non-working period, you want the administrator to receive an error message. In the ***Non-working period*** field, enter ***E*** for error.

      Because no restrictions are to be made on the maximum duration of the absence, enter ***999*** in the ***Maximum duration*** field. Leave the ***Unit*** field ***blank*** for calendar days.

      Save your entries.

Lesson Summary

You should now be able to:

- Customize time recording and administration
- Determine how the system reacts to collisions between time infotypes

Unit Summary

You should now be able to:

- Customize time recording and administration
- Determine how the system reacts to collisions between time infotypes

735

Test Your Knowledge

1. Attendances are entered in infotype 2002.

   Determine whether this statement is true or false.

   □ True

   □ False

736

Answers

1. Attendances are entered in infotype 2002.

   Answer: True

   Attendances are recorded in the *Attendances* infotype (2002) and are defined more specifically by the attendance type (subtype).

Unit 28

737

Attendance and Absence Counting

For more information, see the Instructor Guide in SAPNet.

Unit Overview

This unit describes the rules and options for counting attendances and absences.

Unit Objectives

After completing this unit, you will be able to:

- Set up rules for counting attendances and absences
- Use daily work schedule variants to count absences

Unit Contents

Lesson: Attendance and Absence Counting Rules

738

Lesson Duration: 110 Minutes

Lesson Overview

In this lesson, you process rules for counting attendances and absences.

Lesson Objectives

After completing this lesson, you will be able to:

- Set up rules for counting attendances and absences

For more information, see the Instructor Guide in SAPNet.

Business Example

Attendances and absences must be recorded for your company's employees. Employees call in sick, go on vacation, participate in training courses, or go on business trips.

Introduction

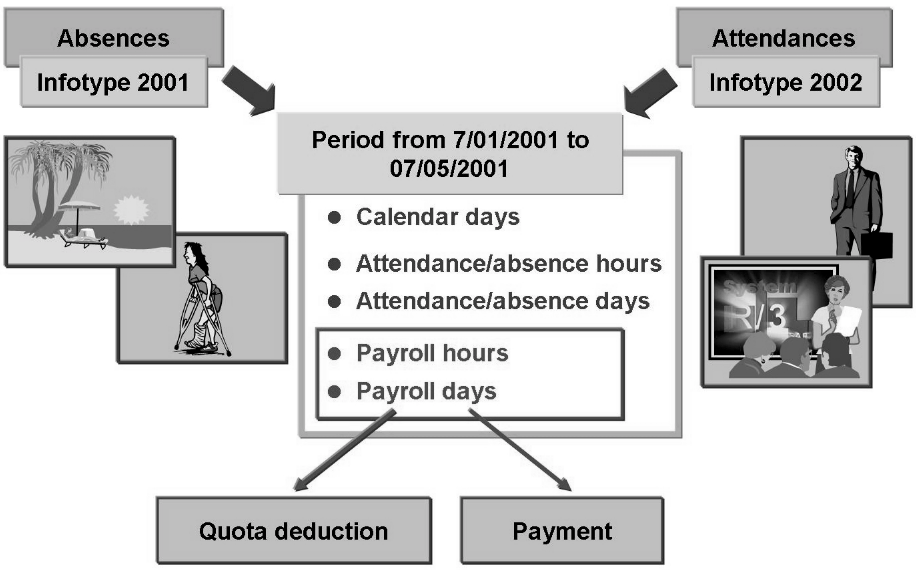

Figure 428: Introduction:

To calculate the duration of an attendance/absence, the system first references the number of planned hours from the daily work schedule valid for the specific day. However, you may not always want to use this method. You may want special rules to apply for counting the duration of an attendance or absence on certain days, for example, such as public holidays and weekdays, or for certain attendances and absences or daily and period work schedules. You can therefore use rules to control how the daily duration of an attendance/absence is counted. You can define such rules in the Implementation Guide (IMG).

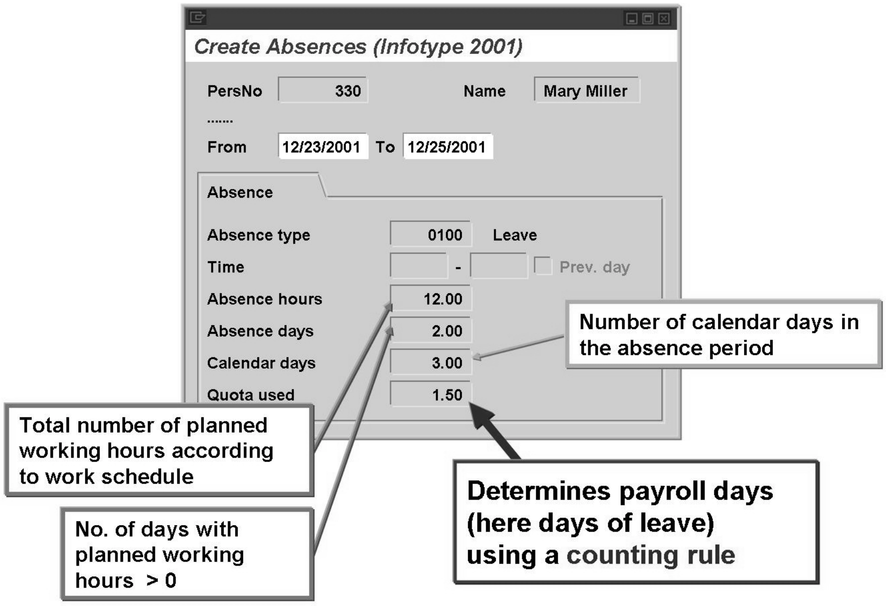

Figure 429: Example: Leave

The duration of an attendance/absence is calculated in five different types of units in the SAP R/3 System. These units are included in the *Attendances* and *Absences* infotypes:

Calendar days:

The system calculates calendar days using actual calendar days for the attendance/absence. Partial days are calculated as 0 calendar days.

Attendance/absence hours, attendance/absence days:

Attendance/absence hours are calculated using the the planned hours specified in the work schedule. In this way, only the days on which the employee had planned hours are included in the calculation.

Payroll hours, **payroll days**:

Payroll days and hours are used for deducting quotas and in payroll (number field of a wage type). The calculation of payroll days and hours is controlled by the settings made for attendance/absence counting. In this way, you can also include attendance/absence days in the calculation for days on which the employee did not have any planned hours.

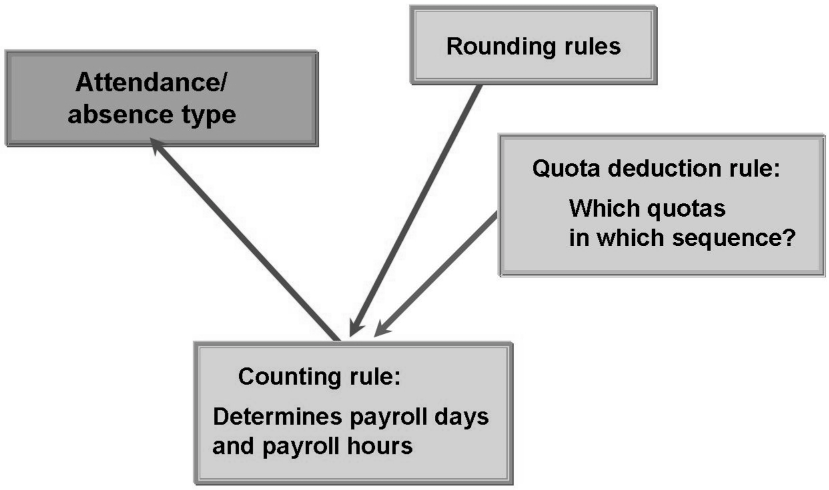

Figure 430: Overview: Assigning Counting and Quota Deduction Rules

Counting rule:

The rules for counting attendances and absences are used to determine the payroll days and hours of an attendance or absence.

Rounding rule:

When attendances and absences are counted, the system may determine values to several decimal places. Because all these decimal places are not normally required for use in quota deduction and in payroll, you can assign a rounding rule to the counting rule to determine how the values are to be rounded.

Deduction rule for quotas:

The counting rule can also be assigned a deduction rule for quotas, which, in the case of quota deduction, determines which quotas are deducted in which sequence.

Assigning a counting rule to an attendance/absence type:

A counting rule must be assigned to each attendance/absence type to ensure that the payroll days and hours are determined for the special attendance/absence.

Furthermore, you must determine whether quota deduction is to be activated for each attendance/absence type. With quota deduction activated, the attendance/absence is deducted from quotas according to the specified quota deduction rules. These quota deduction rules are also assigned to the counting rule.

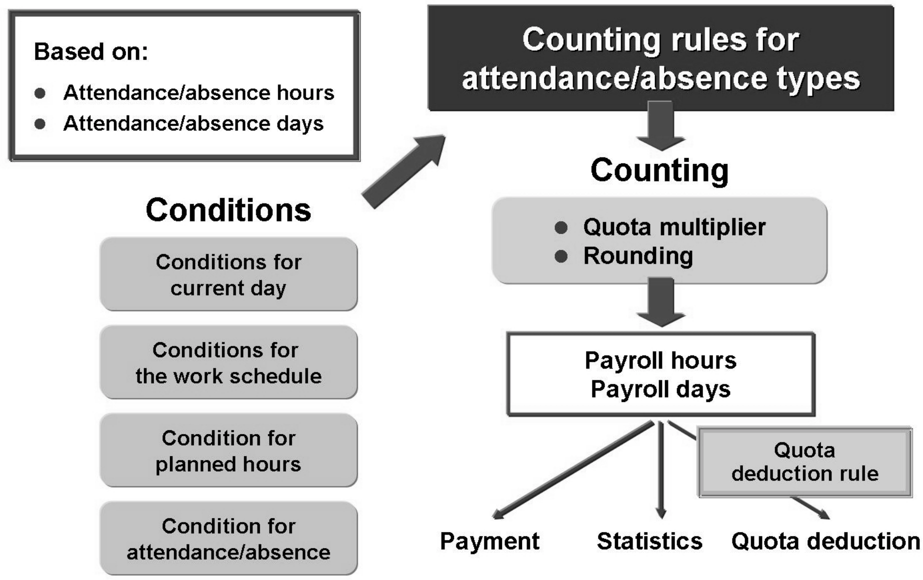

Figure 431: Counting Rules for Attendances/Absences

You define the counting rules for attendances and absences to determine payroll days and hours in Customizing.

The basis for applying the counting rule is the absence days and hours determined by the system. They are calculated using the the planned hours specified in the work schedule.

In a counting rule, you define the following:

Conditions that must be fulfilled for the corresponding counting rule to be used: Conditions for the current day (day of week, public holiday class), conditions for work schedule (classification of daily work schedules and period work schedules), conditions for planned hours (> = 0), conditions for attendances/absences (full-day, partial-day)

Specifications that determine how the payroll days and hours are calculated. Quota multipliers and rounding rules are used in the calculation.

For quota deduction, you can assign quota deduction rules to a counting rule.

A counting rule can consist of several individual rules. These individual rules are distinguished by their sequential number. The system searches through the individual rules until one is met.

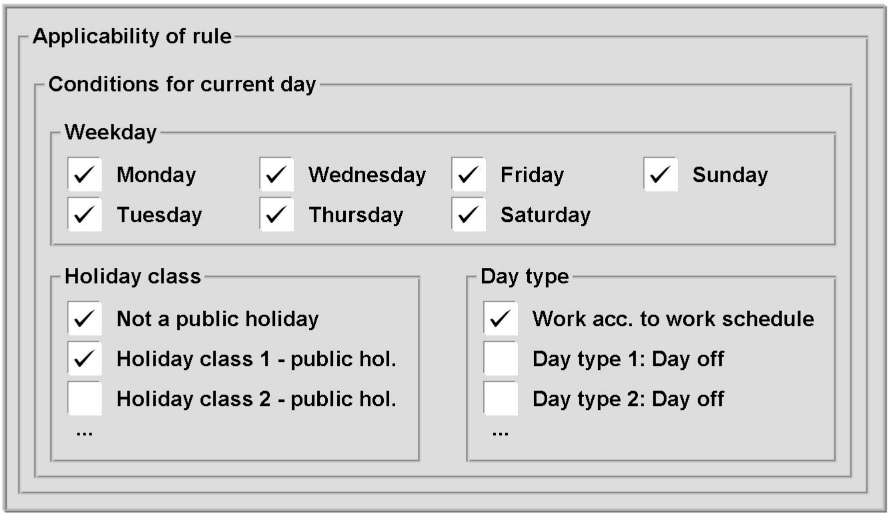

Figure 432: Conditions for the Current Day

You can determine on which days a counting rule for absences/attendances is to be valid.

To do so, use the **conditions for the current day**. (The current day is the day to be counted.) In this section of the screen, you select the characteristics the day must have for the counting rule to apply.

Included in these characteristics are the day of the week (Monday to Sunday), the public holiday class (blank, 1 - 9) and the day type (workday or day off).

Note:

You can select more than one option within a block. For the rule to be valid, at least one of the options must be selected for the block displayed.

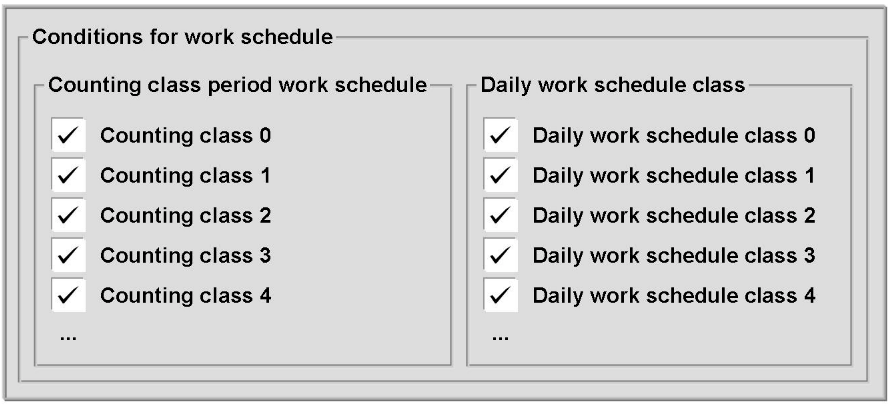

Figure 433: Conditions for the Work Schedule

In some cases, you may want to calculate the duration of absences and attendances differently depending on the type of work on that day or the work pattern.

You can determine for which daily work schedules or period work schedules the counting rule to determine payroll days and hours is to apply.

To do so, you can use the **counting classes of the period work schedules** and the **daily work schedule classes**. You can select from the counting classes **0** to **9** for both the daily and period work schedules. Different counting rules can therefore be set up for different daily work schedules as well as different period work schedules.

Note:

You assign period work schedules to counting classes in the *Define Counting Classes for the Period Work Schedule* activity in the IMG.

Note:

You can select more than one option within a block.

Figure 434: Conditions for Planned Hours and Attendance/Absence

Furthermore, you can limit the validity of the counting rule according to the **conditions for planned hours** and **conditions for the attendance/absence**.

As a condition for the planned hours from the daily work schedule, you can specify whether the planned hours must be equal to or greater than 0.

As a condition for the attendance/absence, you can specify whether the counting rule is valid for full-day or partial-day attendances/absences.

Note:

You can select more than one option within a block.

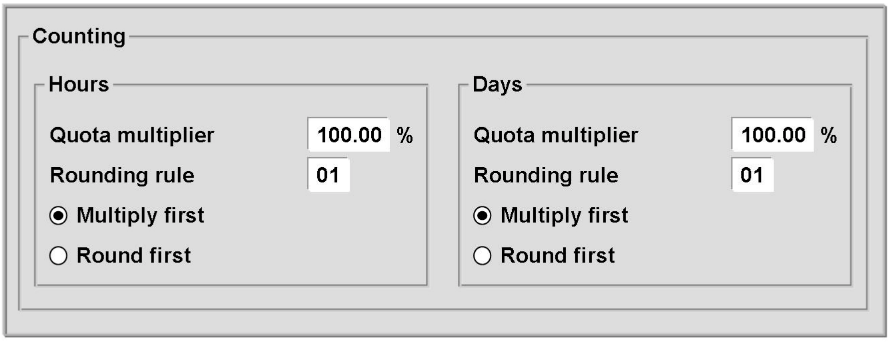

Figure 435: Controlling Counting

After you have specified the conditions for applying the counting rule in the previous steps, you can now define how the payroll days and hours (when the conditions apply) are to be calculated.

You can specify different criteria for counting payroll days and payroll hours.

In this way, you can enter different quota multipliers for each time unit. A quota multiplier of 100% means that the absence hours (or days) are weighted 100%.

In addition, you can assign the rounding rules defined in the **days** and **hours** sections of the screen.

Finally, you can select whether or not you want to multiply first and then round, or vice versa for both of these areas. In this way, you can decide, for example, when hours are counted whether payroll hours should be determined first, and the result rounded according to the assigned rounding rule, or whether the absence hours are to be rounded, and then the payroll hours are determined. This same applies for counting in days.

Note: The **Deduction rule** section is discussed later in this course.

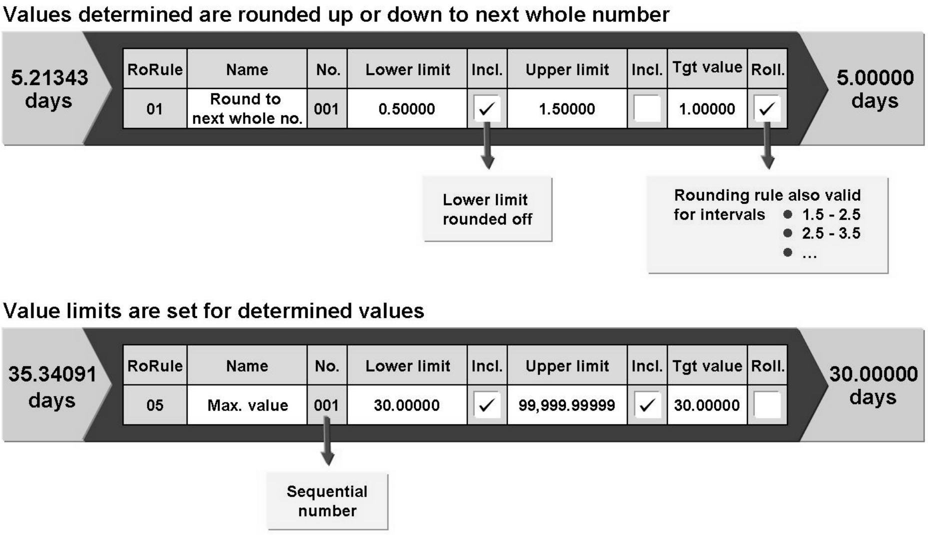

Figure 436: Rounding Rules

To count payroll days and hours, you can use rounding rules to round the values determined up or down.

You can define several rounding rules. A rounding rule is uniquely indicated by its 2-digit number and can consist of several complementary subrules. The system runs through the subrules until one is met.

You define an upper and lower limit for the rounding interval in a rounding rule. In the two**Incl.** columns, you activate the switch to specify whether the upper and lower limits are to be included when calculating the interval. You enter the value to which you want to round up or down in the**Target value** column. In the**Roll** column, you indicate if the interval is to be rolled, that is, copied to all subsequent intervals, by activating the switch. In this case, the duration of the interval is always taken into account.

Example:

According to **rounding rule 01**, all values between 0.5 inclusive and 1.5 exclusive are rounded to the target value **1**. The interval is defined as "rolling" here and is thus carried over to the following intervals.

The rounding rules can be assigned in the counting rules.

Note:

Rounding rules can also be used elsewhere, for example, to determine how absence entitlements are rounded.

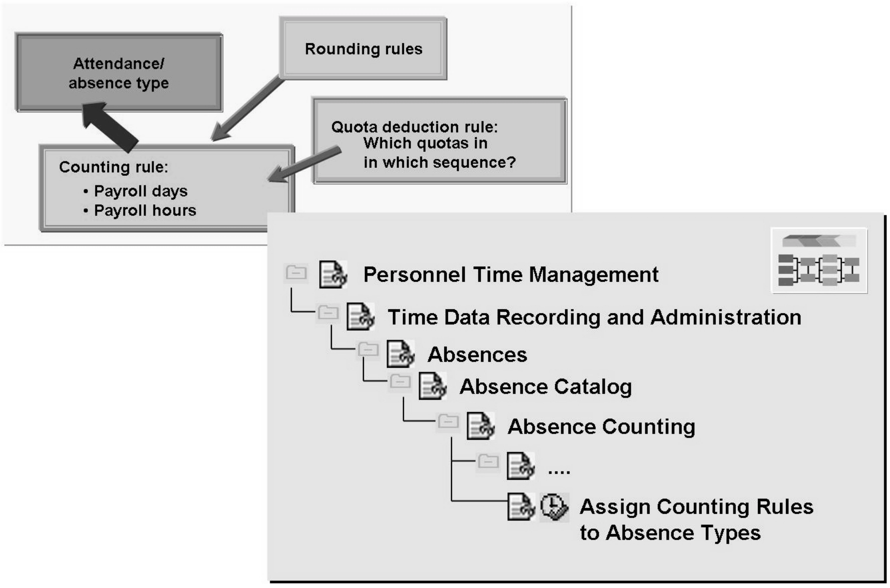

Figure 437: Assigning Counting Rules to Attendance/Absence Types (1)

You have to assign a counting rule to each attendance and absence type so that durations of attendances and absences are also calculated by the counting rules.

Furthermore, you must determine whether the quota deduction function is to be activated for each attendance and absence type.

The relevant Customizing activities are under *Personnel Time Management* → *Time Data Recording and Administration* → *Absences* → *Absence Catalog* → *Absence Counting* and, similarly, under *Attendances* → *Attendance Counting* in the IMG.

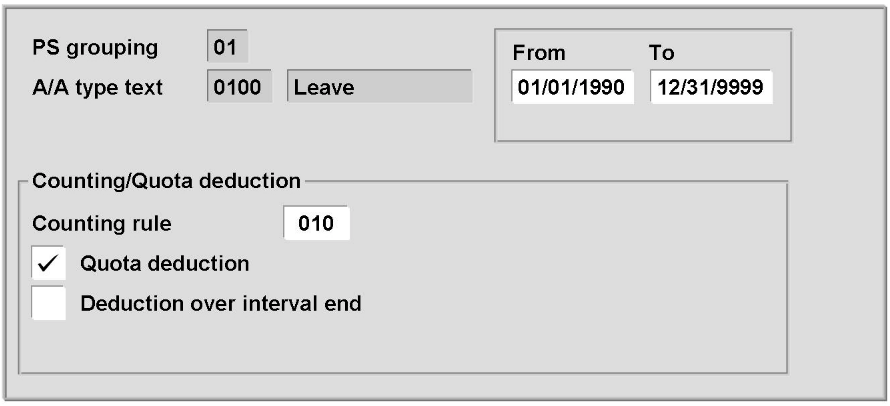

Figure 438: Assigning Counting Rules to Attendance/Absence Types (2)

In the **Counting/quota deduction** section of the screen, you select the counting rule for the corresponding attendance or absence type.

You also activate quota deduction if you want the corresponding attendance/absence type to be deducted from quotas in the *Absence Quotas* infotype (2006) and the *Attendance Quotas* infotype (2007).

Example:

The absence type **Leave (0100)** references the counting rule **010** to calculate durations. This absence type, in turn, can be assigned the rounding rules and deduction rules of the quota types that are to be deducted by this absence type.

Quota deduction is activated in this case. In this way, a deduction is made from the existing quotas according to the quota deduction rule assigned to counting rule **010**.

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Exercise 36: Set Up Counting Rules

Exercise Duration: 30 Minutes

Exercise Objectives

After completing this exercise, you will be able to:

- Create counting rules for attendance and absences

Business Example

Attendances and absences must be recorded for your company. Employees call in sick, go on vacation, participate in training courses, or go on business trips. You create counting rules to determine the payroll days and hours for attendances and absences. You assign these counting rules to the applicable attendance and absence types.

Hint: If the system asks you to enter a country grouping, enter **99 – Rest of world**.

Task:

Attendance and Absence Counting

For the payroll days and hours to be assigned correctly, you must assign a counting rule to this absence type.

1. **Define a counting class for the period work schedule**

   Specify a counting class of a period work schedule of your choice for your newly created period work schedule.

2. **Define a counting rule**

   Define a counting rule with two subrules to be used for your absence type *LE##*.

   First check the relevant personnel subarea and employee subgroup groupings.

   Your personnel subarea *TP##* should be assigned to the personnel subarea grouping for time quotas **01**.

   The applicable employee subgroups should be assigned to the employee subgroup grouping for time quotas **1**.

   For these groupings, create counting rule **1##** (## = your group number) and name it *Counting rule group ##.* Create two subrules, 001 and 002.

   Apply the following specifications to subrule 001:

Continued on next page

The absence is to be counted on all seven days of the week.

The public holiday class of the day must not be 2, that is, the rule applies on all days except half-day holidays.

The absence is counted only if the day is a workday according to the work schedule.

Counting occurs for all period work schedules and all daily work schedules.

The rule applies only to days with planned hours greater than zero and to full-day and partial-day absences.

Hours and days are to be counted as whole amounts (100%).

Hours and days are rounded to the next whole number. Choose and assign a suitable rounding rule.

Absence hours and days are to be multiplied first by the quota multiplier before the values determined for payroll days and hours are rounded.

Do not yet enter any quota deduction rules in the *Deduction rule* section. You will do this in the next unit.

Apply the following specifications to subrule 002:

For subrule 002, use subrule 001 with the following changes:

You want a new counting approach to apply to days that have the public holiday class **2** (that is, half-day holidays). You want only half of these days to be counted.

However, a different rounding rule is to be assigned for counting. Values determined for hours and days are to be rounded to two decimal places. Use rounding rule **04** here.

Assign the applicable rounding rule in the *Hours* and *Days* sections of the screen. You also want to calculate the values first and then round them.

For days with the public holiday class **2**, however, counting occurs as follows:

Hours are to be counted as their full amount. Full-days are to be valued as half-days.

Use the rounding rule specified above.

3. **Assign a counting rule to an absence type**

   Assign the counting rule **1##** to the absence type **LE##**. Check if quota deduction for the absence type **LE##** is already activated.

   Note: Creating quotas and quota deduction are covered in the next unit.

Solution 36: Set Up Counting Rules

Task:

Attendance and Absence Counting

For the payroll days and hours to be assigned correctly, you must assign a counting rule to this absence type.

1. **Define a counting class for the period work schedule**

   Specify a counting class of a period work schedule of your choice for your newly created period work schedule.

   a) **Define a counting rule for the period work schedule**

      Because the counting class of the period work schedule is queried in the counting rules, you must make an entry for your newly created period work schedule in the applicable Customizing view.

      In the Implementation Guide (IMG), choose *Personnel Time Management → Time Data Recording and Administration → Absences → Absence Catalog → Absence Counting → Define Counting Classes for the Period Work Schedule*.

      Select and **copy a suitable entry**, and in the *Period work schedule* field, enter your previously created period work schedule *PZ## (WP##)*. Make sure that you copy the correct personnel subarea grouping (***01***). In the *Counting class* field, enter any counting class (between *blank* and *9*). Save your entries.

2. **Define a counting rule**

   Define a counting rule with two subrules to be used for your absence type *LE##*.

   First check the relevant personnel subarea and employee subgroup groupings.

   Your personnel subarea *TP##* should be assigned to the personnel subarea grouping for time quotas **01**.

   The applicable employee subgroups should be assigned to the employee subgroup grouping for time quotas **1**.

   For these groupings, create counting rule **1##** (## = your group number) and name it *Counting rule group ##.* Create two subrules, 001 and 002.

   Apply the following specifications to subrule 001:

   The absence is to be counted on all seven days of the week.

   The public holiday class of the day must not be 2, that is, the rule applies on all days except half-day holidays.

Continued on next page

The absence is counted only if the day is a workday according to the work schedule.

Counting occurs for all period work schedules and all daily work schedules.

The rule applies only to days with planned hours greater than zero and to full-day and partial-day absences.

Hours and days are to be counted as whole amounts (100%).

Hours and days are rounded to the next whole number. Choose and assign a suitable rounding rule.

Absence hours and days are to be multiplied first by the quota multiplier before the values determined for payroll days and hours are rounded.

Do not yet enter any quota deduction rules in the *Deduction rule* section. You will do this in the next unit.

Apply the following specifications to subrule 002:

For subrule 002, use subrule 001 with the following changes:

You want a new counting approach to apply to days that have the public holiday class **2** (that is, half-day holidays). You want only half of these days to be counted.

However, a different rounding rule is to be assigned for counting. Values determined for hours and days are to be rounded to two decimal places. Use rounding rule **04** here.

Assign the applicable rounding rule in the *Hours* and *Days* sections of the screen. You also want to calculate the values first and then round them.

For days with the public holiday class **2**, however, counting occurs as follows:

Hours are to be counted as their full amount. Full-days are to be valued as half-days.

Use the rounding rule specified above.

a) **Define a counting rule**

   In the Implementation Guide (IMG), choose *Personnel Time Management → Time Data Recording and Administration → Absences → Absence Catalog → Absence Counting → Rules for Absence Counting (New)*.

   To check the employee subgroup grouping for time quotas, choose *Group Employee Subgroups for Time Quotas*. Check the relevant employee subgroups (**X0** and **X1**) to make sure that your employee is assigned to the employee subgroup grouping for time quotas **1**.

Continued on next page

To check the personnel subarea grouping for time quotas, choose *Group Personnel Subareas for Time Quotas*. Check whether your personnel subarea **TP##** is assigned to the grouping **01**.

To check the rounding rules that you want to assign to your counting rule, choose *Define Rules for Rounding Counted Absences*. Rule **01** corresponds to the requirements of this exercise: the values determined are rounded to the next whole amount.

Define a counting rule with subrule 001

To create a new counting rule, choose *Define Counting Rules.*

Choose the *New entries* option, or choose *Edit → New entries*.

Enter the employee subgroup grouping **1** and personnel subarea grouping **01** as well as the counting rule **1##** (## = group number). Name your counting rule *Optional counting rule group ##*, for example.

Because the counting rule has two subrules, enter the sequence number **001** in this field. (You define the sequence number 002 in the next step.)

For the **Conditions for current day**, enter the following specifications:

The absence is to be counted on all days of the week. Select all seven days in the *Weekday* section of the screen.

The absence is counted according to its public holiday class. It applies on all holiday classes except **2**. In the *Holiday class* section, select the *Not a public holiday* option and the holiday classes **1** and **3** through **9**.

The absence is only to be counted if it is a workday according to the work schedule. Select the *Work acc. to work schedule* option in the *Day type* section of the screen.

Conditions for the work schedule:

Select all options in the *Counting class for period work schedule* and *Daily work schedule class* sections of the screen.

Conditions for the planned hours: Select the *Planned hours > 0* option. Conditions for absence/attendance: Choose both *< 1 day* and *Full-day* options.

Counting:

Because hours and days are to be counted in their entirety, enter **100%** as the quota multiplier for both areas.

Because only whole hours and days are to be determined, choose for each the rounding rule **01**. This enables the values determined to be rounded to whole amounts.

Continued on next page

The absence days and hours are to be first weighted by the quota multiplier, and then rounded. Leave the default option *Multiply first* as is.

No entries are required in the *Deduction rule* section.

Save your entries.

Define a counting rule with subrule 002

In the Implementation Guide (IMG), choose *Personnel Time Management → Time Data Recording and Administration → Absences → Absence Catalog → Absence Counting → Rules for Absence Counting (New)*..

To create a new subrule of your counting rule, copy your subrule 001 and to subrule 002. Make the appropriate settings for subrule 002.

To do so, leave the current view by choosing *Back*, then select the subrule **001** from the initial screen, and then choose *Copy*.

For the new subrule, enter the sequential number **002** and modify the rule as follows:

Because the subrule **002** is only to be valid for days with public holiday class **2**, activate the public holiday class **2** option in the *Holiday class* block, and deselect all of the other options in this section.

Copy all of the other conditions in subrule **001** as they are to subrule **002**.

If you want to count in hours, copy the existing specifications. If you want to count in days, change the quota multiplier to **50%**. Change this value accordingly.

Now, days with holiday class 2, that is, half-day holidays, are counted using the second rule (002) at 50%; all other days are counted using the first rule (001) at 100%.

Save the subrule **002**.

3. **Assign a counting rule to an absence type**

   Assign the counting rule **1##** to the absence type **LE##**. Check if quota deduction for the absence type **LE##** is already activated.

Continued on next page

Note: Creating quotas and quota deduction are covered in the next unit.

a) **Assign a counting rule to an absence type**

To assign the counting rule **1##** (where ## = your group number) to your absence type **LE##,** choose *Personnel Time Management* → *Time Data Recording and Administration* → *Absences* → *Absence Catalog* → *Absence Counting* → *Assign Counting Rules to Absence Types* in the IMG.

Select the absence type **LE##** and choose *Details*, or choose *Goto* → *Details* from the menu.

In the *Counting rule* field for your absence type **LE##**, enter the counting rule **1##**.

Make sure that the *Quota deduction* field is activated.

Save your entries.

Lesson Summary

You should now be able to:

- Set up rules for counting attendances and absences

Lesson: Counting Using Daily Work Schedule Variants

757

Lesson Duration: 30 Minutes

Lesson Overview

In this lesson, you learn about counting absences using daily work schedule variants.

Lesson Objectives

After completing this lesson, you will be able to:

- Use daily work schedule variants to count absences

For more information, see the Instructor Guide in SAPNet.

Business Example

Counting rules are specified for these attendances and absences to determine how many payroll days or hours are to be calculated. These payroll days or hours are required for deduction from quota entitlements, for payment, or for other statistical purposes, for example. You must set up the appropriate counting rules and assign them to the individual attendance and absence types.

Daily Work Schedule Variants

Example:

	Mo	Tu	We	Th	Fr
Planned working hours according to work schedule	8	8	8	8	4
Basis for counting particular attendances/ absences	7.2	7.2	7.2	7.2	7.2

The planned working hours specified in the work schedule are not used when counting attendances/absences. Instead, a specific number of planned working hours (such as an average value) is referenced, which is specified in a daily work schedule variant.

Figure 439: Counting Using Daily Work Schedule Variants: Introduction

The absence days and hours determined by the planned working hours stored in the work schedule are used as a basis for counting payroll days and hours.

Occasionally, you may not want the counting of certain full-day attendances or absences to be based on the planned working hours stored in the work schedule. You can influence the number of planned hours by assigning an applicable daily work schedule variant.

Example:

In your enterprise, employees work eight hours each day from Monday through Thursday. On Friday, they work four hours. You want the absence hours for illness to be determined using averages. To do so, you specify a daily work schedule variant such as variant A with 7.2 hours, for example.

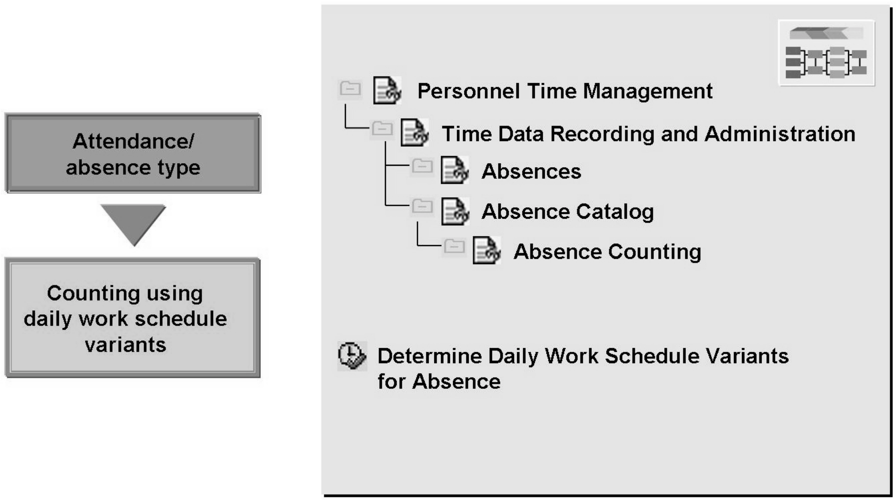

Figure 440: Counting Using Daily Work Schedule Variants (1)

Sometimes you may want an attendance or absence to be counted using a special daily work schedule variant (in addition to the counting rules). The variant must already exist and is referenced depending on the rules defined.

The process for doing so is similar to the one for setting up and controlling variants for the work schedule.

The relevant Customizing activities are under *Personnel Time Management → Time Data Recording and Administration → Absences → Absence Catalog → Absence Counting* and, similarly, under *Attendances → Attendance Counting* in the IMG.

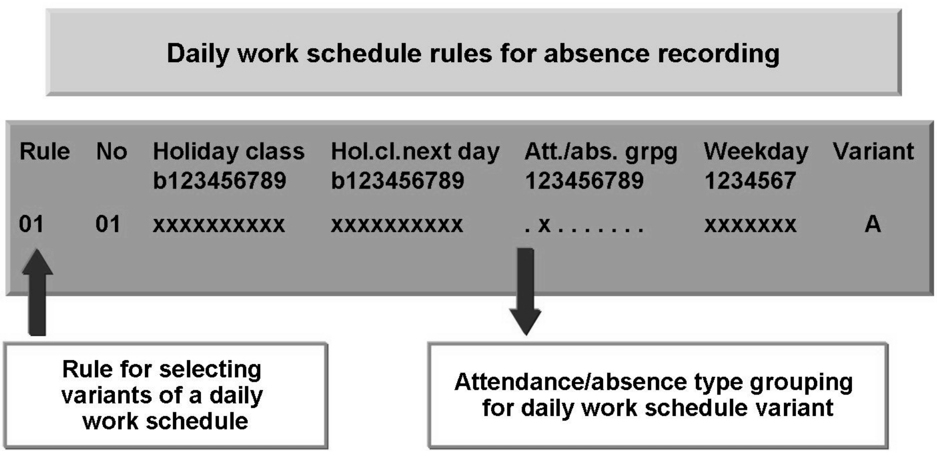

Figure 441: Counting Using Daily Work Schedule Variants (2)

Before you create the counting rule for daily work schedule variants, you must first check whether your attendance and absence type is correctly grouped. This grouping is only required for the attendance or absence types that you want to count using variants. Attendance and absence types to be handled in the same way must be grouped together in a grouping.

The value of the grouping is queried when variants are selected during attendance/absence counting

The rules are created taking the following conditions into account:

Public holiday class of the current day

Public holiday class of the following day

Grouping of absence or attendance types for daily work schedule variant

Weekday

The rule to be used for attendance/absence counting using daily work schedule variants must be assigned to the daily work schedule.

Facilitated Discussion

Discussion Questions

Use the following questions to engage the participants in the discussion. Feel free to use your own additional questions.

Lesson Summary

You should now be able to:

- Use daily work schedule variants to count absences

Unit Summary

You should now be able to:

- Set up rules for counting attendances and absences
- Use daily work schedule variants to count absences

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Test Your Knowledge

1. All attendances and absences are counted using the same rule.

   Determine whether this statement is true or false.

   □ True

   □ False

2. It is possible to use daily work schedule variants to base attendances and absences on different planned working hours.

   Determine whether this statement is true or false.

   □ True

   □ False

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Answers

1. All attendances and absences are counted using the same rule.

   Answer: False

   It is possible to assign the same rule to all attendances and absences, but each attendance and absence can also have a separate counting rule.

2. It is possible to use daily work schedule variants to base attendances and absences on different planned working hours.

   Answer: True

   It is possible to specify different planned working hours in the variant to be applied to a particular absence.

Unit 29

765

Attendance and Absence Quotas

For more information, see the Instructor Guide in SAPNet.

Unit Overview

This unit teaches you how to configure attendance and absence quota types. You also learn how to define default values for granting absence entitlements and how you can compensate quotas.

Unit Objectives

After completing this unit, you will be able to:

- Set up attendance and absence quota types
- Set up deduction from quota entitlements
- Describe the methods for accrual of attendance and absence quotas
- Determine default values to accrue quota entitlements
- Use the quota overview
- Explain how quota entitlements are compensated

Unit Contents

Lesson: Setting Up Attendance and Absence Quotas

766

Lesson Duration: 20 Minutes

Lesson Overview

This lesson teaches you how to configure attendance and absence quota types.

Lesson Objectives

After completing this lesson, you will be able to:

- Set up attendance and absence quota types

For more information, see the Instructor Guide in SAPNet.

Business Example

In your enterprise, employees are granted different attendance and absence entitlements for leave, educational leave, and so on. First, you need to create these different quota types. Furthermore, you want to use default values to accrue employees' absence entitlements, and have absence entitlements accrued automatically by a report. To do so, you must create the applicable rules in the system.

Quotas

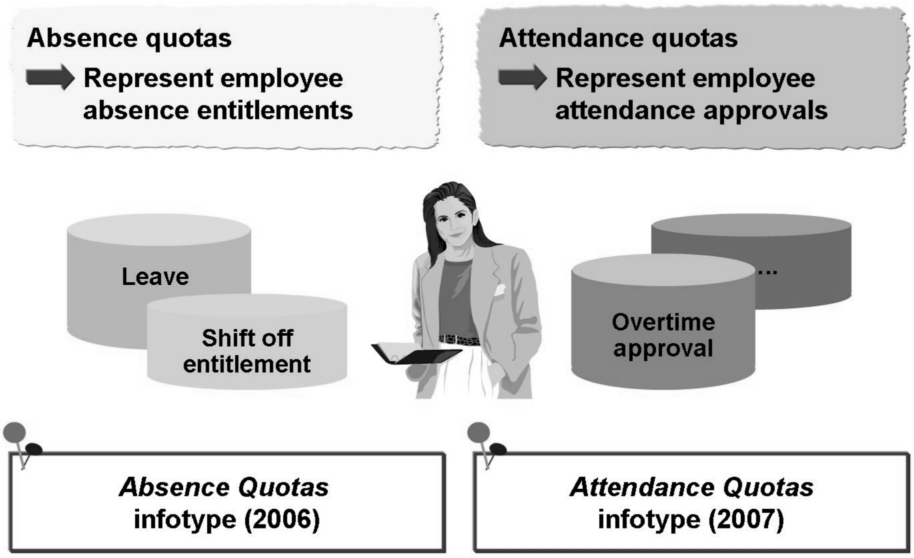

Figure 442: Introduction: Quotas

Employees in your enterprise are entitled to leave, additional training, and so on. These types of entitlements can be stored in quotas, from which attendances and absences are deducted.

You set up employees' absence entitlements, such as standard annual leave, non-working shift entitlement, and so on, in the *Absence Quotas* infotype (2006) .

You set up approvals for special attendances (such as overtime approvals) in the *Attendance Quotas* infotype (2007). These approvals can be queried in time evaluation.

An absence quota is an employee's time-limited entitlement to an absence. Similarly, an attendance quota is an employee's time-limited entitlement to an attendance. Attendance quota types and absence quota types are used to represent these entitlements in the system.

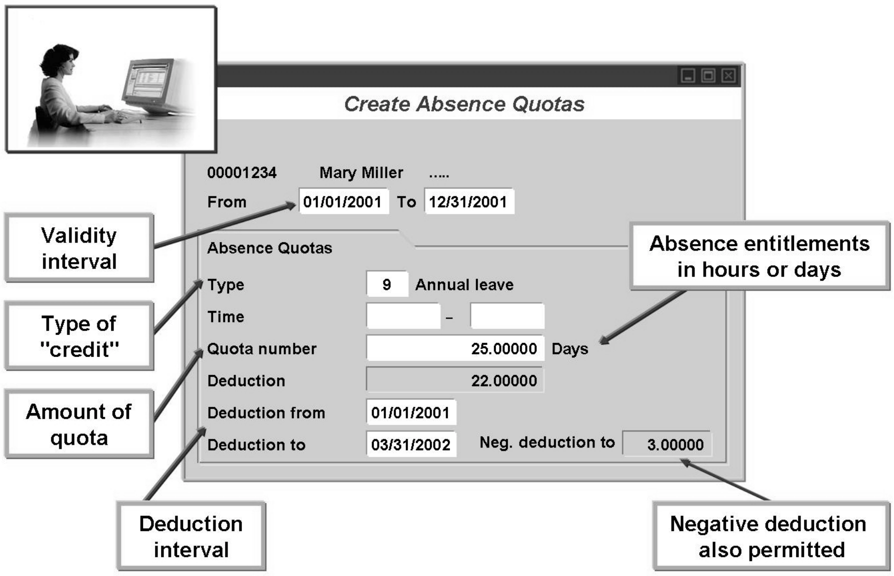

Figure 443: Example: An Employee's Absence Quota

An attendance or absence quota (standard annual leave, for example) is granted to an employee for a specific validity period.

The deduction interval for the absence quotas specifies the period in which employees can use the quota. The deduction from and deduction to dates of the quota do not have to match the validity period.

The type of credit (standard annual leave, educational leave, and so on) is determined by the quota type.

The amount of credit is specified by the quota number (in days or hours).

When you customize each quota type, you define whether the quota is managed in days or hours and whether deduction beyond zero is permitted.

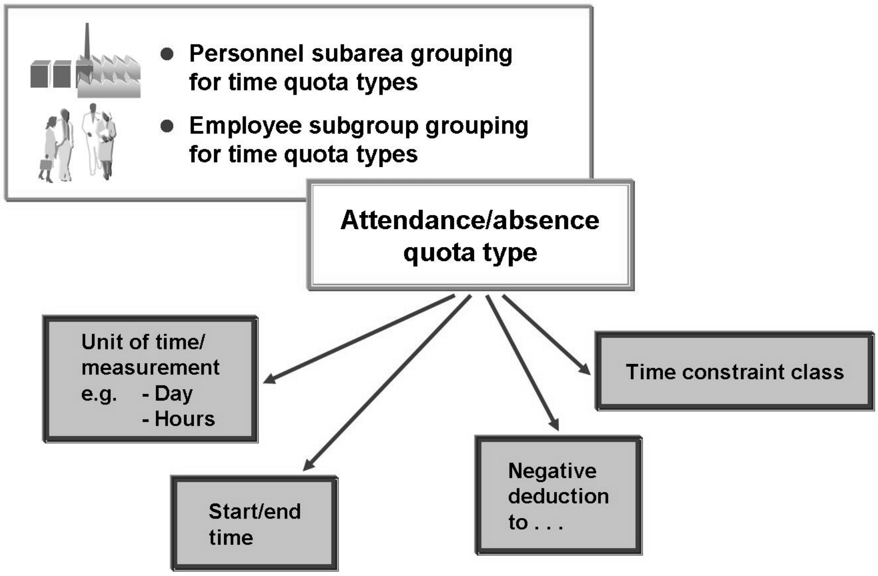

Figure 444: Attendance and Absence Quota Types

Attendance and absence quota types are defined in the IMG based on the personnel subarea and employee subgroup groupings for time quota types.

An employee subgroup grouping for time quota types is a break-down of employee subgroups for which the same attendance and absence quota types are valid.

A personnel subarea grouping for time quota types is a break-down of personnel subareas for which the same attendance and absence quota types are valid.

For each quota type, you specify the time unit (days/hours) you want to use to manage the quota. If you want to restrict the validity of entitlements to certain clock times, you can specify an applicable time interval for each quota type. If this time interval is adopted when you create a quota for an employee, the entitlement applies only within the specified time interval.

Furthermore, you can specify the amount to which a quota can be deducted beyond its entitlement. The amount specified for negative deduction also appears in the *Attendance Quotas* (2007) and *Absence Quotas* (2006) infotypes.

Each attendance or absence quota type is assigned a time constraint class, which is checked if time infotypes collide.

Absence quota types can be locked for compensation.

Facilitated Discussion

Discussion Questions

Use the following questions to engage the participants in the discussion. Feel free to use your own additional questions.

Lesson Summary

You should now be able to:

- Set up attendance and absence quota types

Lesson: Quota Deduction

770

Lesson Duration: 110 Minutes

Lesson Overview

In this lesson, you learn how to set up quota deduction.

Lesson Objectives

After completing this lesson, you will be able to:

- Set up deduction from quota entitlements

For more information, see the Instructor Guide in SAPNet.

Business Example

[Use a business example to explain the practical use of this lesson for an enterprise.]

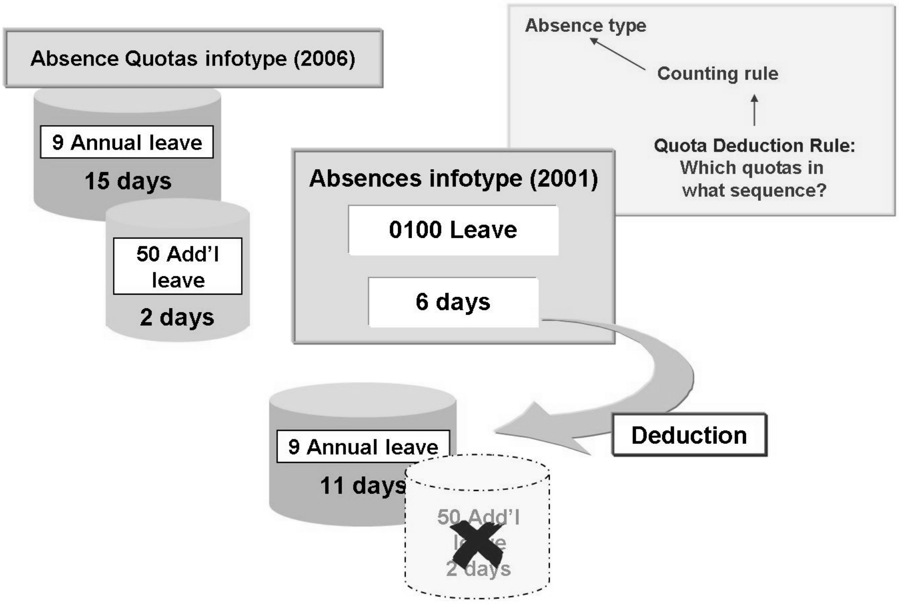

Figure 445: Quota Deduction: Overview

Absences are entered in the *Absences* infotype (2001), and the absence type is specified. Attendances are entered in the same way in the *Attendances* infotype (2002), where the attendance type is specified.

Absence quotas are specified with their corresponding quota types in the Absence Quotas infotype (2006), and attendance quotas in the *Attendance Quotas* infotype (2007).

Quotas and the attendances and absences to be deducted from them are stored for a specific key date. Number range intervals must be defined in the IMG for this purpose.

If quotas are to be deducted by attendances and absences, you have to specify which absence or attendance type is deducted from which quotas in which sequence.

Example:

An employee's annual entitlement to leave is stored in the *Absence Quotas* infotype (2006) in combination with the relevant quota type. For example, an employee has 25 days of standard annual leave (represented in quota type **9**), as well as 3 days of additional leave (represented in quota type **50**). If the employee takes leave (absence type **0100**), then you must specify from which quota this absence type 0100 is to be deducted and in what sequence the applicable quotas are to be deducted. This relationship is detailed in the following slides.

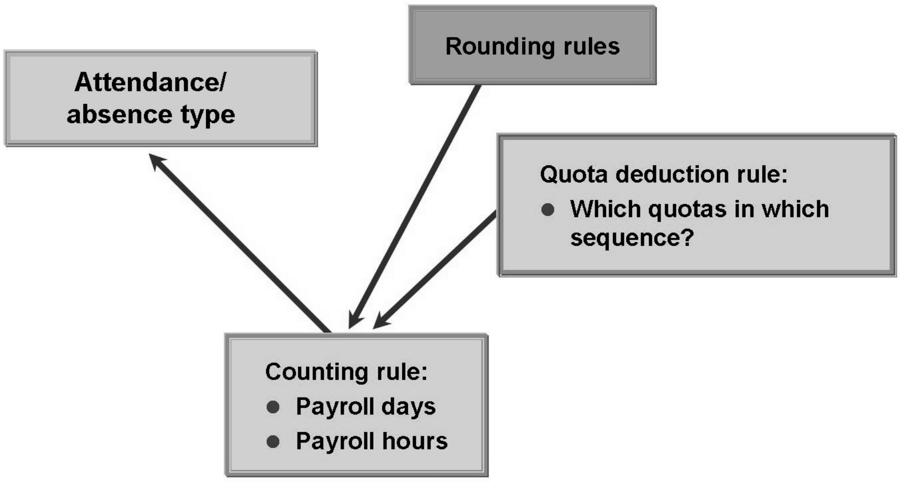

Figure 446: Interaction Between Deduction and Counting

An attendance/absence type can be deducted from a quota only if a relationship already exists between the attendance/absence type and the applicable quota.

This relationship is established by an assignment made in the IMG under *Managing Time Accounts Using Attendance/Absence Quotas → Quota Deduction Using Attendances/Absences*.

A counting rule is assigned to the attendance/absence type to determine the payroll hours and days for the duration of this attendance/absence. In turn, quota deduction rules are assigned to the counting rules to determine the quotas from which the attendance/absence type is to be deducted, and the sequence of quotas.

The *Activate Quota Deduction* option specifies whether or not quota deduction is to take place for each attendance/absence type.

If you activate the option when assigning a counting rule to an attendance/absence type, then the attendance/absence type is deducted from the quotas according to the quota deduction rule stored in the counting rule.

If the quota deduction option is not activated for a particular attendance/absence type, then the quota deduction rule assigned to the counting rule does not apply to this attendance/absence type.

A rounding rule can also be assigned to a counting rule to round the payroll hours and days determined.

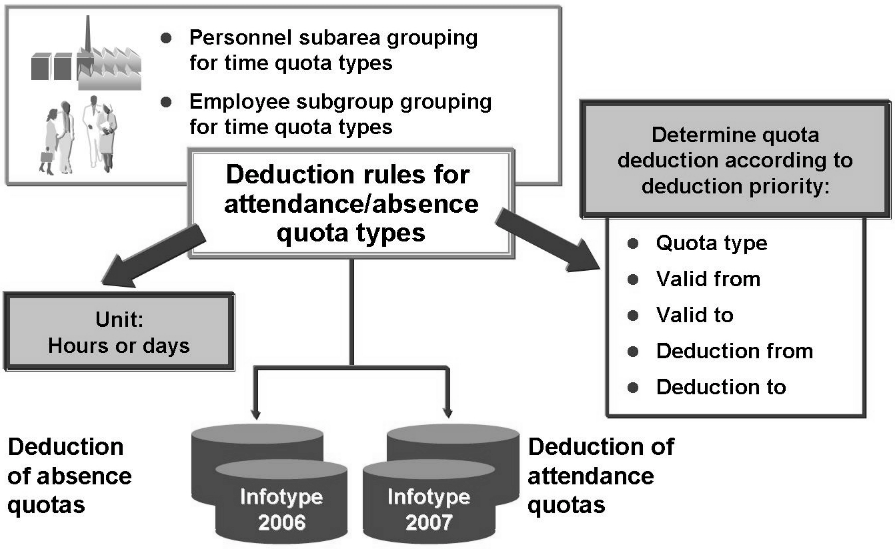

Figure 447: Deduction Rules for Attendance and Absence Quotas

The sequence for deducting quotas of different quota types is specified in the deduction rules. This sequence can be determined depending upon various criteria (such as the quota type), which can be assigned priorities. In this way, you can define a specific sequence of quota types.

These deduction rules are based on the employee subgroup grouping for time quotas and the personnel subarea grouping for time quotas.

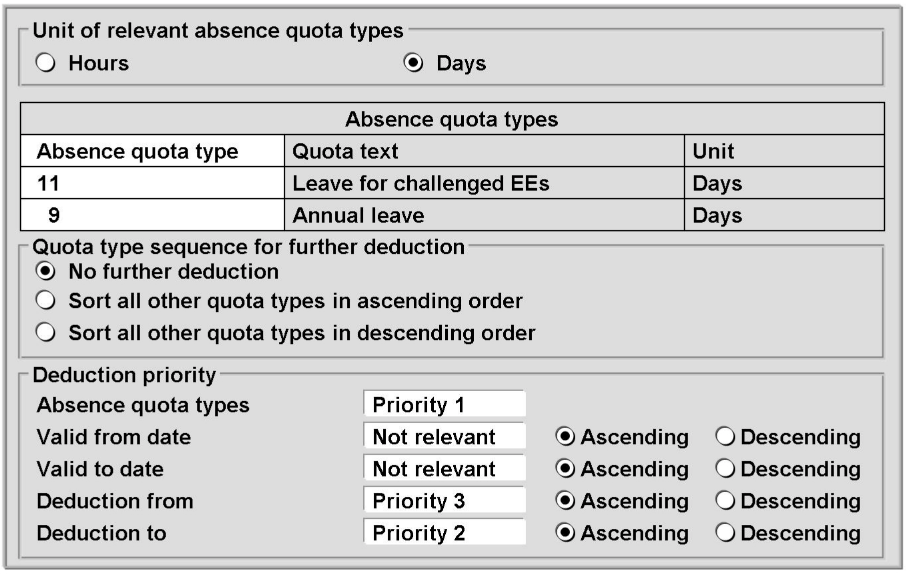

Figure 448: Example: Deduction Rule for Absence Quotas

A deduction rule for absence quotas depends on the personnel subarea grouping for time quotas and the employee subgroup grouping for time quotas. The deduction rule is indicated by a 3-digit number.

The unit (hours or days) of the quota types to be deducted is selected in the deduction rule. This unit must be the same unit as in the quota types to be deducted.

Using the deduction priority, you can set priorities for deduction based on criteria such as **quota type, validity start/end**, and **deduction start/end**.

Furthermore, you can store a specific sequence for quota deduction (up to 100 quota types in a certain sequence). If you want quotas to be deducted that are not listed explicitly, you can specify the sequence for subsequent deduction. The deduction sequence can be descending or ascending according to the quota type. First the special sequence is used, then the sequence for subsequent deduction.

So that this special sequence or the quota type sequence for next deduction is taken into account, you have to set a priority for the quota type.

If the deduction sequence no longer corresponds to the rule as a result of subsequent cancellations, you can use the **RPTBPC10 report** to restore it.

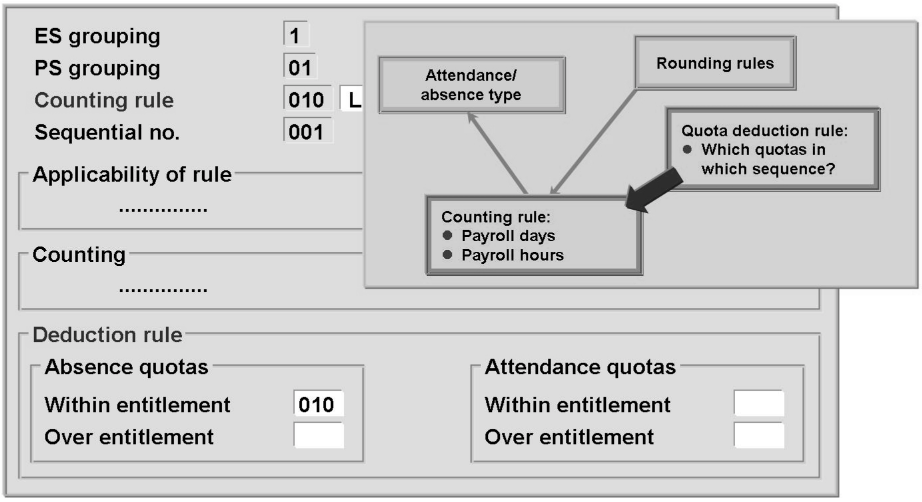

Figure 449: Assigning Quota Deduction Rules to Counting Rules

Quota deduction rules are assigned to counting rules. Rules governing the deduction of absence quotas and rules governing the deduction of attendance quotas are assigned to a counting rule.

The deduction rules for attendance quotas and those for absence quotas are each specified in separate areas.

You have two options in each area for specifying deduction rules: You can specify deduction rules that:

Govern the deduction of quotas up to the existing entitlement in the *Absence Quotas* (2006) and *Attendance Quotas* (2007) infotype.

Regulate deduction from quotas over and above the existing quota entitlement

Note: As a prerequisite, there must be corresponding quotas with a negative lower deduction limit in the infotype for the relevant period (*Negative deduction to* field in the *Absence Quotas* (2006) and *Attendance Quotas* (2007) infotypes).

Note:

The deduction rules in the *Within entitlement* and *Over entitlement* fields within the same block must deduct from attendance/absence quotas using the same time unit.

In contrast, deduction rules for absence quotas and those for attendance quotas can use different time units.

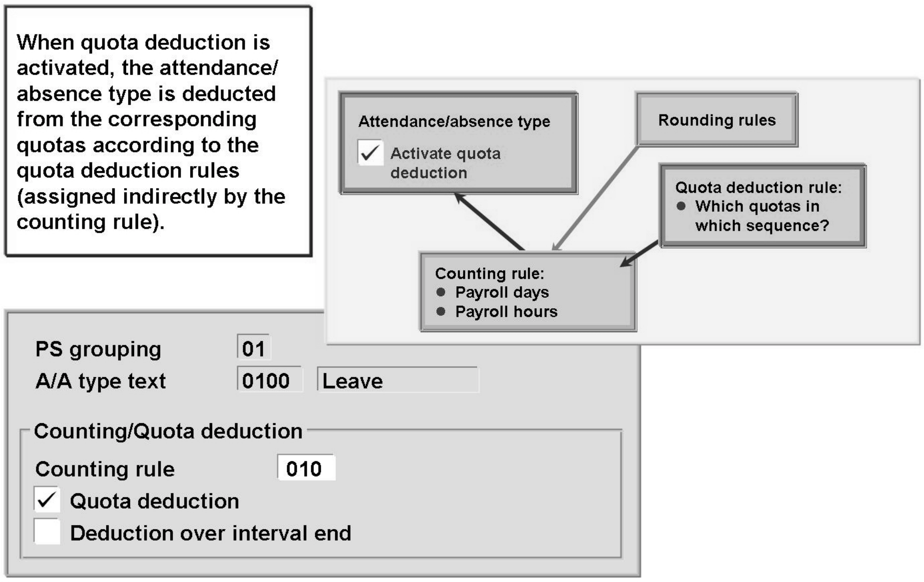

Figure 450: Activating Quota Deduction

To assign a counting rule to an attendance/absence for determining payroll hours and days, choose the *Assign Counting Rules to Absence Types* (or *Assign Counting Rules to Attendance Types*) activity. You assign a counting rule to the attendance/absence type in the *Counting/Quota Deduction* section.

To activate quota deduction, set the *Quota deduction* indicator. Then the system accesses the applicable deduction rules in the counting rule (quota deduction rules for absence quotas in the case of absence types, and the quota deduction rules for attendance quotas for attendance types). The corresponding attendance/absence type is deducted from the quotas in the *Absence Quotas* (2006) and *Attendance Quotas* (2007) infotypes according to the specifications for quota deduction rules.

If you want quota deduction to be continued after the end date of the quota interval, activate the *Deduction over interval end* field. The deduction is carried out as long as the start date for the applicable attendance/absence record lies within the deduction interval of the quota.

Example: For the **Leave** absence type, the counting rule **010** is specified for determining payroll days and hours. Rounding and deduction rules are assigned to this counting rule. Because quota deduction is activated for the absence type **Leave**, the recorded time is deducted from the absence quota according to the deduction rules for absence quotas stored in the counting rule.

Facilitated Discussion

Discussion Questions

Use the following questions to engage the participants in the discussion. Feel free to use your own additional questions.

Lesson Summary

You should now be able to:

- Set up deduction from quota entitlements

Lesson: Determining Default Values to Grant Absence Entitlements

777

Lesson Duration: 100 Minutes

Lesson Overview

This lesson provides an overview of the methods for accruing quotas. You also learn how to set up default values for accruing absence entitlements.

Lesson Objectives

After completing this lesson, you will be able to:

- Describe the methods for accrual of attendance and absence quotas
- Determine default values to accrue quota entitlements

For more information, see the Instructor Guide in SAPNet.

Business Example

In your enterprise, employees are granted different attendance and absence entitlements for leave, educational leave, and so on. First, you need to create these different quota types. Furthermore, you want to use default values to accrue employees' absence entitlements, and have absence entitlements accrued automatically by a report. To do so, you must create the applicable rules in the system.

Methods

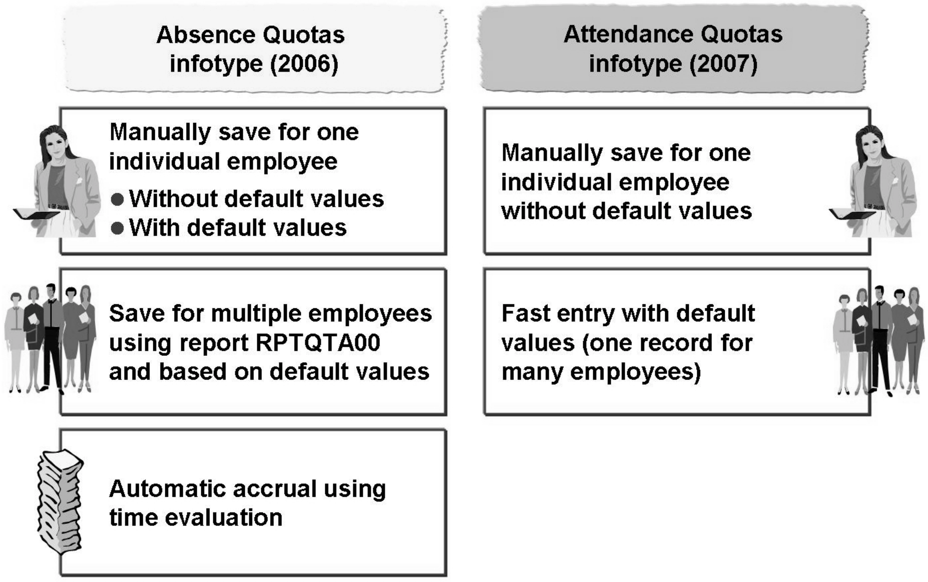

Figure 451: Quota Accrual: Overview

There are various methods available for granting absence entitlements to employees:

By manually recording absence entitlements in the *Absence Quotas* infotype (2006), where absence entitlement is granted to employees individually based on special criteria

By setting default values for entitlements when creating records in the *Absence Quotas* infotype (2006)

By automatically accruing absence entitlements. The entitlement determined has to be changed only in exceptional cases.

An addition, two methods are available to automatically accrue time-off credits:

Using the **RPTQTA00 report**, you can generate time-off entitlements for groups of employees that granted for all the relevant employees in advance. One such example is annual leave, which is granted in advance for one calendar year.

If time evaluation (RPTIME00) is in use, you can also permit time-off entitlements to be determined proportionately after a calculation period is completed. Standard leave is an example where entitlement increases for each employee at the end of a calculation period. In this process, as opposed to the general granting of leave in advance, employees receive their time-off entitlement after they have "worked for it."

Attendance quotas are specified manually in the *Attendance Quotas* infotype (2007).

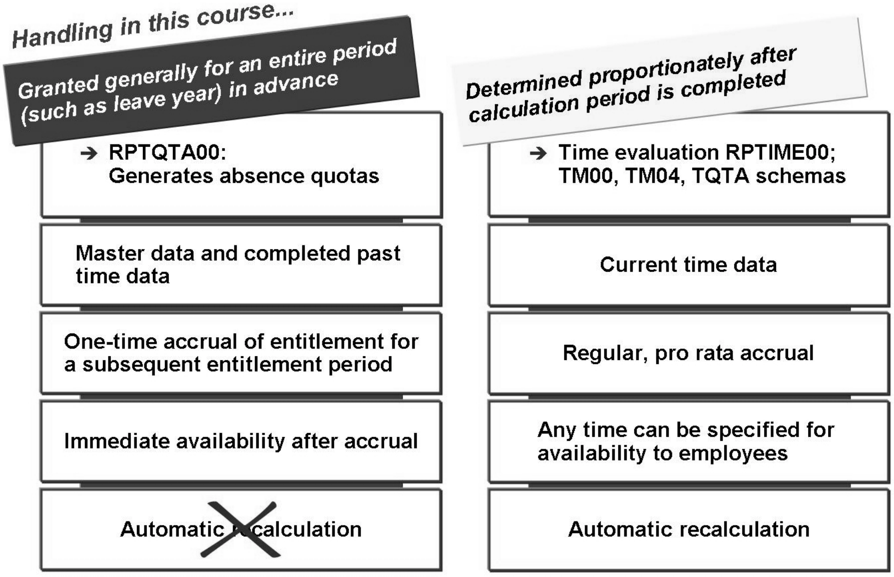

Figure 452: Absence Entitlements in the Absences Infotype (2006)

The method used for accruing absence entitlements depends upon whether absence entitlement is granted in a lump sum in advance or proportionately after a calculation period has been completed.

Where absence entitlement is granted in its entirety in advance, the total entitlement for a subsequent period (such as a calendar year) is accrued at one time in advance. The entitlement is immediately available in the *Absence Quotas* infotype (2006). The system can calculate the entitlement on the basis of the employee's HR master data, such as age or seniority. If you use time evaluation, you can take account of completed time data from past periods.

If an absence entitlement is granted in its entirety, you can manually overwrite the generated data records in the *Absence Quotas* infotype (2006).

If you use time evaluation, you can determine time-off entitlements proportionately after a calculation period is completed. Unlike advance, lump sum entitlements, in this method, employees are granted their entitlements only after they have already "worked" for them. Current time data can also be used as the basis for determining entitlement. An employee, for example, might be entitled to 1.5 days of time-off entitlement for each payroll period - provided he or she has completed the planned hours. The period for which the credit is calculated and the time at which the quota is stored in a record in the *Absence Quotas* infotype (2006) are independent of one another.

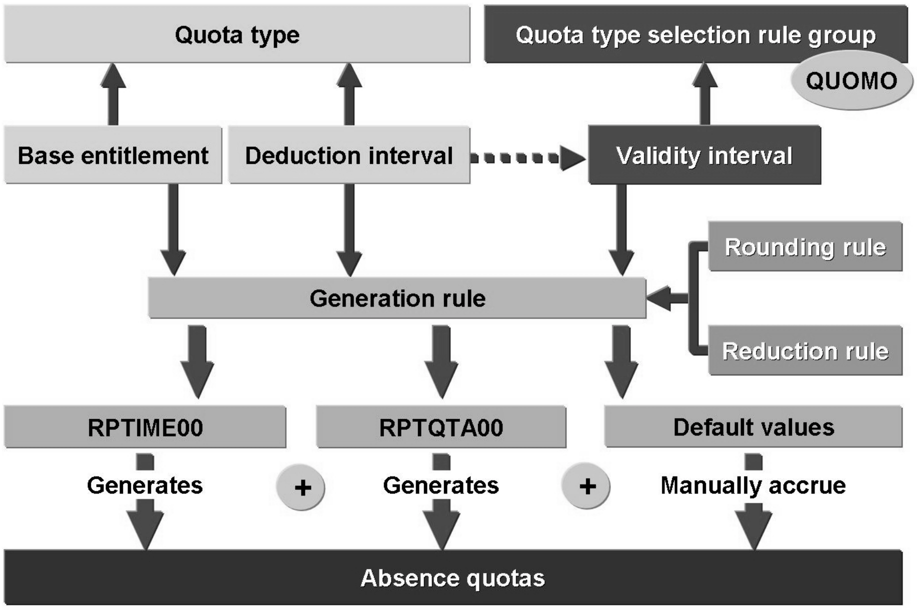

Figure 453: Accrual of Absence Entitlements

Absence quotas can be filled using generation rules or default values.

In this slide, you get an overview of the various elements that play a part in the accrual of absence entitlement, and the different methods used for accrual.

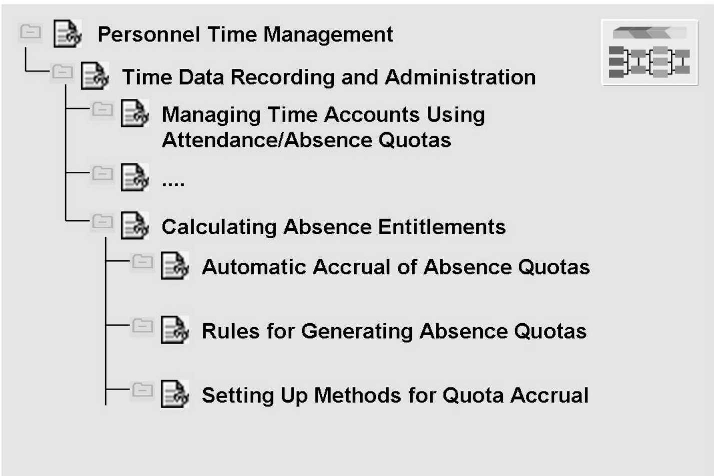

Figure 454: Calculating Absence Quota Entitlements

Note:

Generation rules for granting lump-sum entitlement to time-off credits and those for automatic quota accrual using time evaluation are mainly set up in the same Customizing activities in the Implementation Guide (IMG).

The following section focuses on how to create rules for calculating absence entitlements based only on determining default values and the generating of entitlements using the RPTQTA00 report (Generate Absence Quotas).

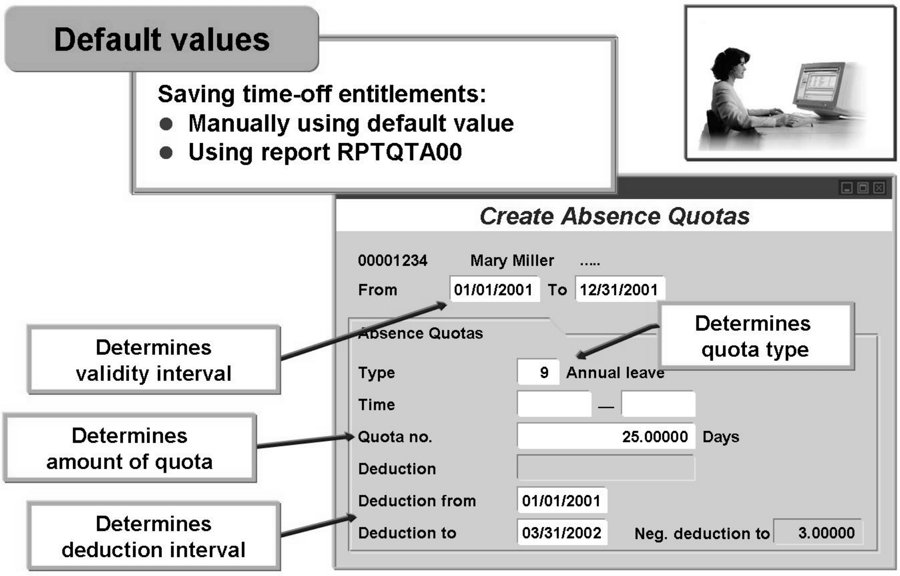

Figure 455: Granting General Absence Entitlements: Default Values

You must specify for all quota types whether they are to be accrued automatically using time evaluation, or manually, or using the report RPTQTA00 (Generate Absence Quotas).

You must specify in the IMG before calculating absence entitlements that quota types accrued either manually or using the RPTQTA00 report are not to be generated in time evaluation.

When granting general absence entitlements in advance using default values or the report RPTQTA00, the system determines the quota type, quota number, and validity and deduction periods from Customizing tables.

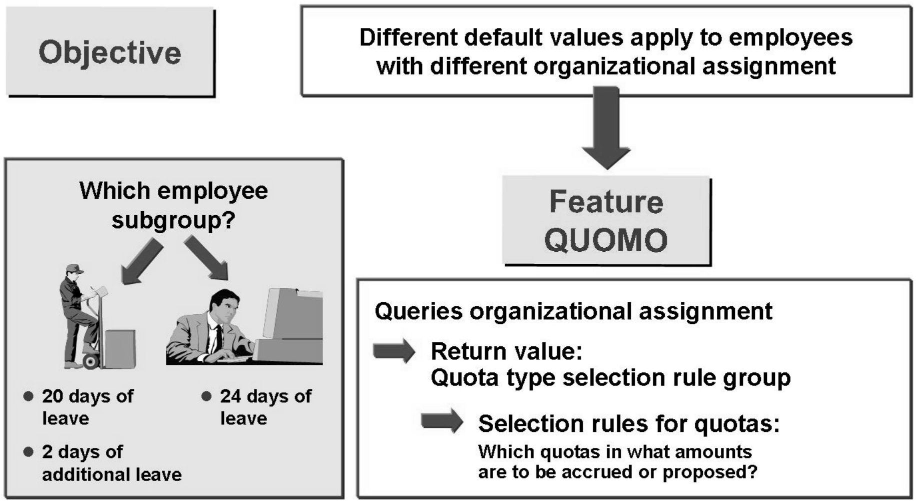

Figure 456: Determining Quota Type Selection Rule Group

You can use the quota type selection rule group to control absence quota type selection based on the employee's organizational assignment. By using different quota type selection rule groups, you can define different rules for quota selection.

In manual accrual of quotas using default values and for quota accrual by report RPTQTA00, the quota type selection rule group is determined using the **QUOMO** feature. You use the QUOMO feature to define which quota type selection rule group your employees are assigned to, based on their organizational assignment. In a subsequent step, you specify selection rules for the quota type selection rule group to control absence quota accrual.

Example: Salaried employees are granted 24 days of standard annual leave for each year. In contrast, hourly-wage earners are granted 20 days of standard annual leave, with 2 days of additional leave. You make this distinction by assigning a different quota type selection rule group to the different employee subgroups (salaried employees, hourly-wage earners). These quota type selection rule groups are each assigned quota selection rules that determine what amounts of which quotas are to be proposed or accrued.

Note: If you use time evaluation, you can also assign the quota type selection rule group in the time evaluation schema.

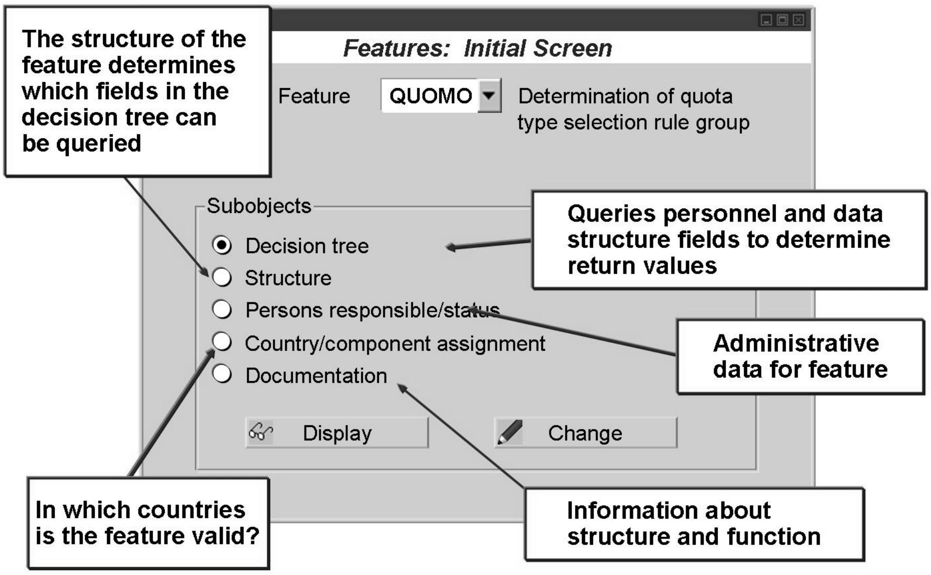

Figure 457: Maintaining Features (1)

Features are objects within the SAP R/3 System that determine a particular value, called a return value or result, by querying various personnel or data structure fields. The value is used to determine default values or to control certain system processes. In this way, features improve system flexibility.

There are two options for accessing feature maintenance:

By branching directly to feature maintenance from the IMG for Personnel Time Management or Payroll. In this case, the feature called is always the one that is assigned to that step in the IMG.

By accessing the feature maintenance transaction, **PE03**, directly. The *Features: Initial Screen* appears.

Features are defined by the following five elements, which must be maintained in the following sequence when creating a feature:

- Person responsible for a feature
- Documentation for feature
- Country/component assignment of a feature
- Structure of feature
- Decision tree for feature

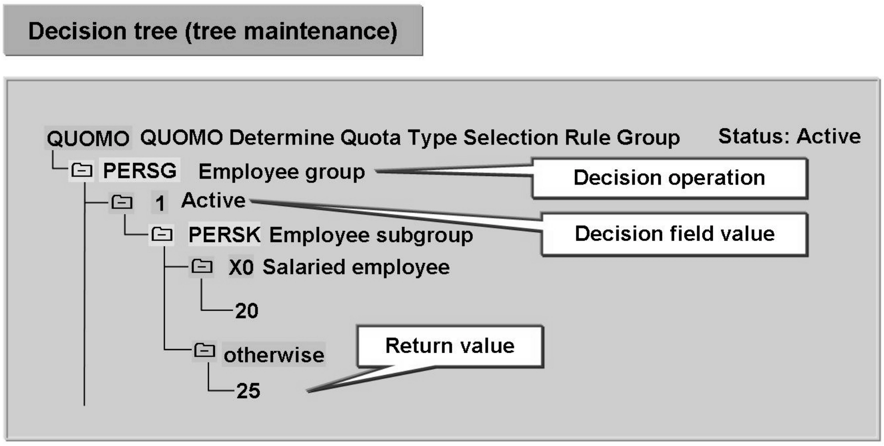

Figure 458: Maintaining Features (2)

In the decision tree of the QUOMO feature, you define which quota type selection rule group is valid for which employees. The decision rule in the feature can be structured according to various organizational elements, such as company code, personnel area, employee group, employee subgroup.

Decision trees can be simple or very complex, depending on their function and the number of fields, operations, and decision criteria included.

The employee group is queried first in the above example. For the employee group **1** (active employees), the employee subgroup is queried. For employee group **1** and employee subgroup **DU** (salaried employees), the quota type selection group **20** is set; for all other employee subgroups, the quota type selection group **25** is set. This enables you to differentiate between employees with a different organizational assignment.

If you prefer the table maintenance layout, you can switch to it by choosing the *View* menu option.

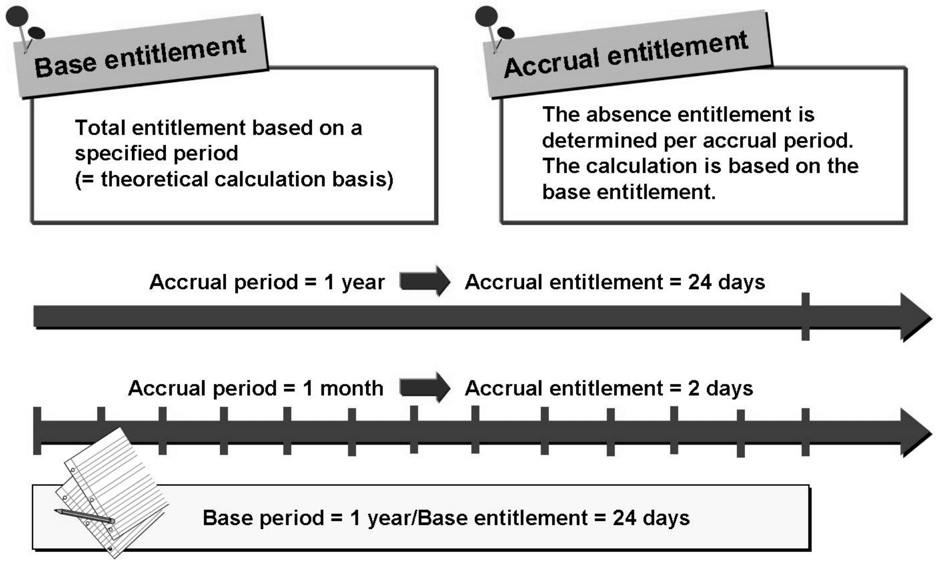

Figure 459: Explanation of Terms: Base Entitlement and Accrual Entitlement

Base entitlement/period: For each absence quota type, you can store a total entitlement (in days or hours) based on a specified period (such as a calendar year). The base entitlement is a theoretical value used as the basis for calculating the accrual entitlement.

Accrual period: This period describes the interval that applies to calculating the absence credit. The accrual period can be selected independently of the base period (such as payroll period, month, and so on). The accrual and base periods can also be identical.

Accrual entitlement: The accrual entitlement is the absence entitlement calculated for an accrual period. The calculation of the accrual entitlement is based on the base entitlement. By comparing the base period and the accrual period, the system converts the base entitlement to the accrual period, and, in this way, determines the accrual entitlement. For example, the accrual entitlement (for a base entitlement of 24 days per year), based on an accrual period of 1 month, is 2 days.

You can set the accrual period based on collective agreements, legal provisions, and internal company policy.

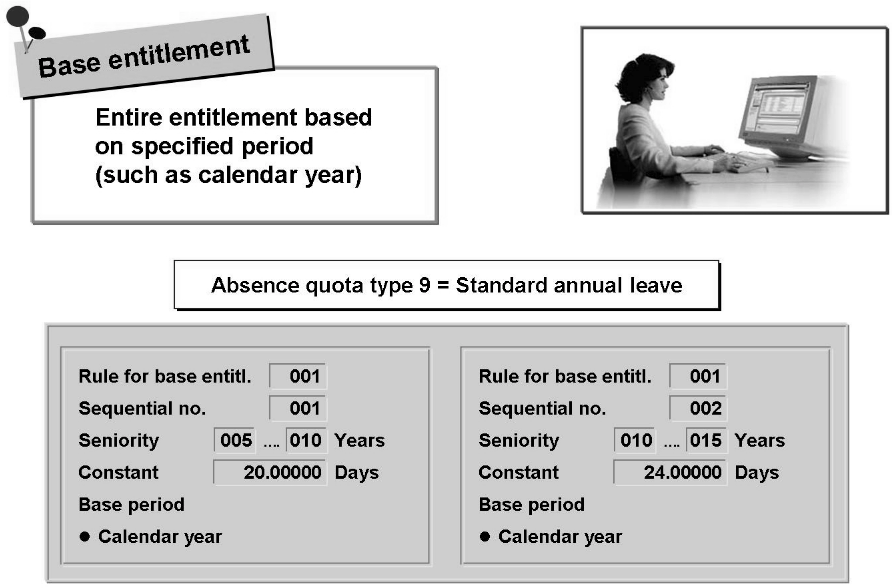

Figure 460: Define base entitlements

The base entitlement represents the calculation base used to calculate the proportionate absence entitlement for each accrual period.

The base entitlement can be determined on the basis of an employee's age or seniority.

If you want to define different base entitlements for each age or seniority interval, then you can summarize this in one rule. The individual intervals of the rule are differentiated by the assigned sequential number. They are delimited from one another by open-ended intervals.

The base entitlement is related to a fixed period. It can be

Based on a calendar year or any period of your choice

Determined using time evaluation or payroll periods

Determined on the basis of the accrual period

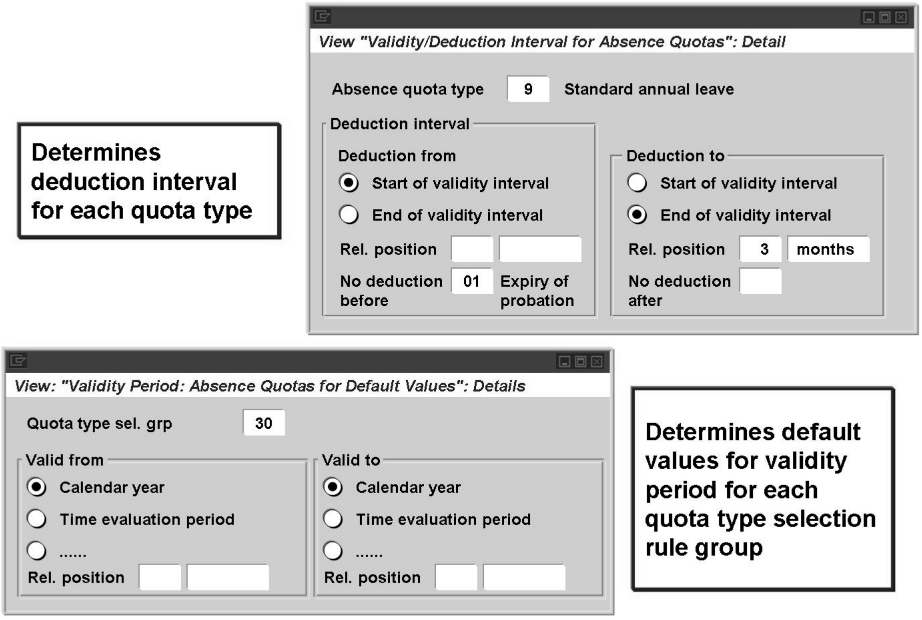

Figure 461: Validity and Deduction Intervals

To determine absence entitlements using default values or to accrue absence entitlements using the **RPTQTA00** report, you can determine the validity and deduction periods for the quota types as follows:

Default values for the validity period are specified for each quota type selection rule group. This means that the same validity period is proposed for all quotas that are proposed for each quota type selection rule group. These default values for the validity period are set up in the IMG in the *Set Up Automatic Accrual Using Report RPTQTA00* activity for each quota type selection rule group.

The default value for the deduction interval is determined for each quota type. The start and end times for deduction are defined relative to the validity start and end. These default values for the deduction period are set up in the IMG in the *Determine Validity and Deduction Periods* activity. (The name of the IMG activity reflects the fact that the validity interval is also specified for the quotas accrued in time evaluation.)

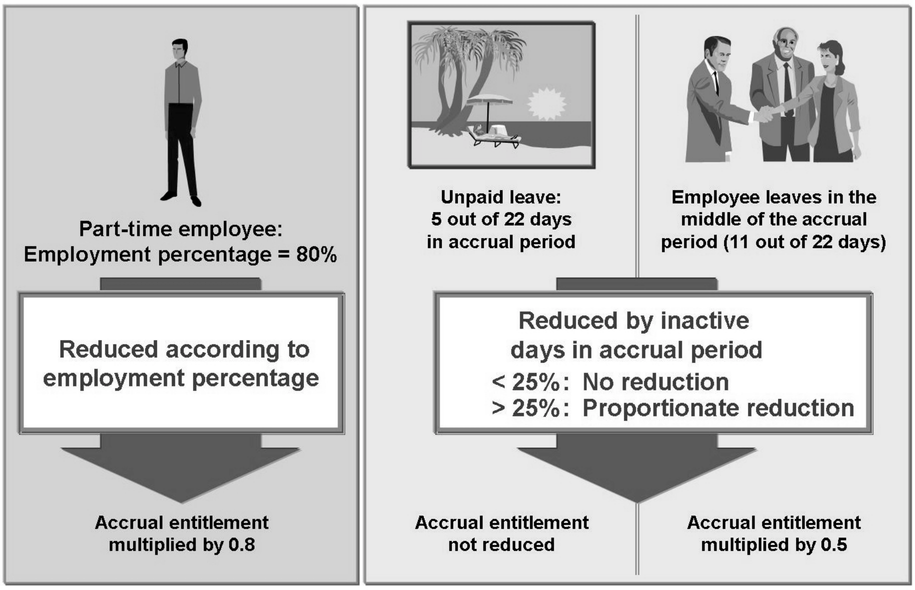

Figure 462: Reduction Rules

In the *Define Rules for Reducing Quota Entitlements* activity, you define the reduction rules to determine the conditions under which a calculated entitlement is to be reduced.

Reduction rules are used if employees are not to be granted full entitlement to an absence quota because they:

Worked part-time

Were not employed for the entire period, that is, they had inactive periods of employment because they just started working at the company, or they left a company, for example

Had certain absence times that had an "inactive" day status, such as unexcused absences. You indicate whether an absence is valuated as inactive time by using an appropriate absence type.

Reduced working times can be identified using special absence quotas. You determine in absence quota type selection whether the reduced times are to be omitted or collected in other special absence quotas.

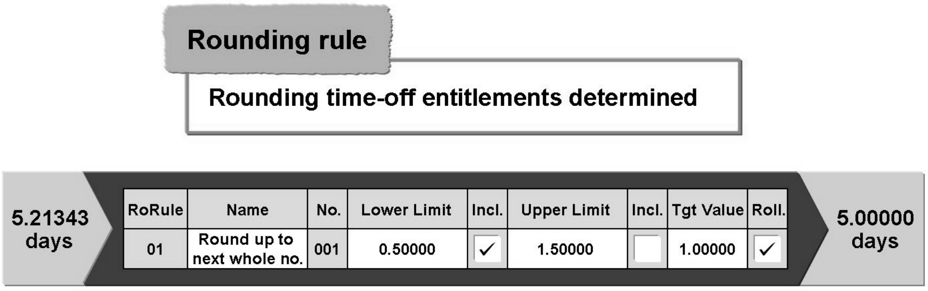

Figure 463: Rounding Rules

In the *Define Rules for Rounding Quota Entitlements* step, you define rounding rules to round the quota entitlements determined by the system.

You can define several rounding rules. A rounding rule is uniquely indicated by its 2-digit number and can consist of several complementary subrules. The system runs through the subrules until one is met.

You define an upper and lower limit for the rounding interval in a rounding rule. In the two**Incl.** columns, you activate the switch to specify whether the upper and lower limits are to be included when calculating the interval. You enter the value to which you want to round up or down in the *Target value* column. In the**Roll** column, you indicate if the interval is to be rolled, that is, copied to all subsequent intervals, by activating the switch. In this case, the duration of the interval is always taken into account.

These rounding rules are also used when determining attendance/absence hours and days in attendance and absence counting.

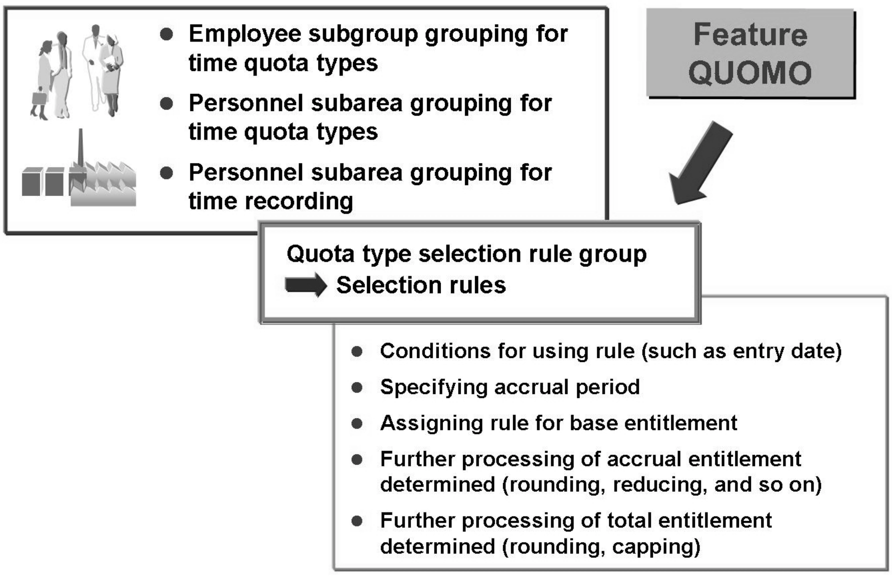

Figure 464: Selection Rules

In the *Define Generation Rules for Quota Type Selection* step, you define rules for the accrual of employees' time-off entitlements. This section focuses only on the rules applying to determining default values or generation using the RPTQTA00 report.

The rules for quota selection are defined according to the above-named personnel subarea and employee subgroup groupings.

Note: The personnel subarea grouping for time recording is located in the *Time Evaluation* section of the IMG.

In addition, these rules are defined based on a quota type selection rule group. The quota type selection rule group is set in the QUOMO feature on the basis of the employee's organizational assignment. Selection rules are stored for the quota type selection rule group to determine the quotas to be accrued, the amounts, how they are rounded, and so on.

Quotas are accrued for the applicable employees using the RPTQTA00 report or default values for creating quotas are determined according to the selection rules.

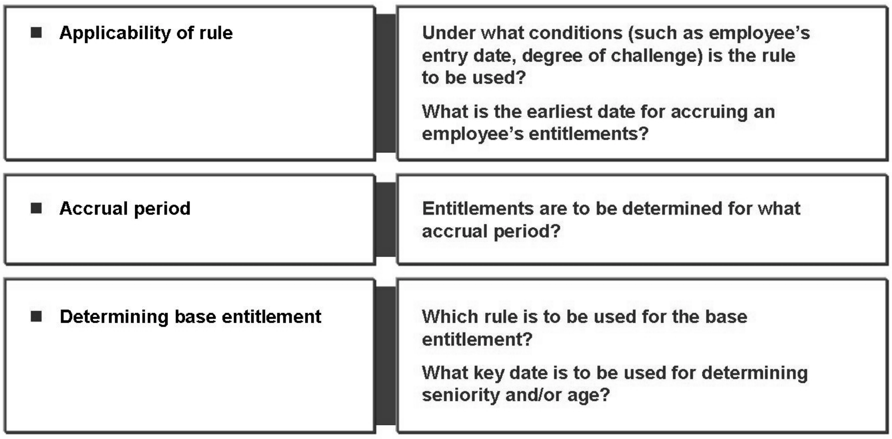

Figure 465: Absence Quota Type Selection (1)

In a selection rule for quota types, you make the following settings:

In the *Applicability* tab, you define the conditions under which the selection rule is to be used (dependent on employee's hiring date or only for employees in a certain challenge group or with a certain degree of challenge, for example). In addition, you can also specify the earliest date on which the absence entitlement can be acquired (such as after a probation period).

In the *Accrual period* tab, you define the accrual period for determining the entitlements.

In the *Base entitlement* tab, you specify a previously created rule for base entitlement to set the applicable base entitlement (depending on age and seniority, if required). This base entitlement is used to determine the accrual entitlement. You can also specify how age or seniority is to be determined.

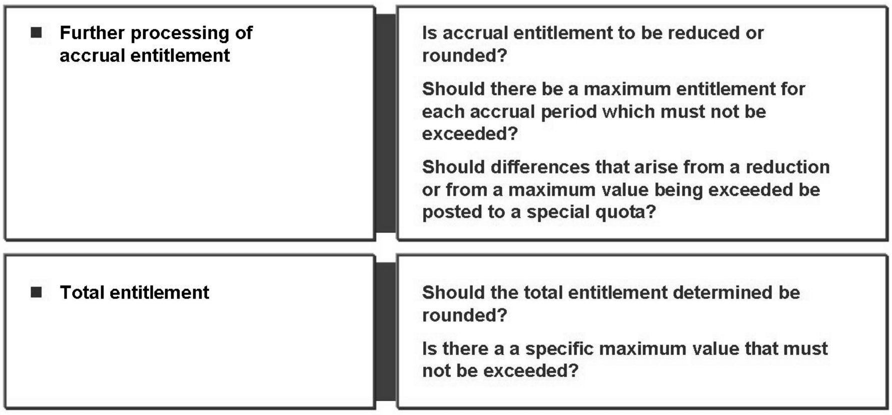

Figure 466: Absence Quota Type Selection (2)

A preliminary accrual entitlement can be determined on the basis of the data in the first three tab pages. You can specify in the *Further processing of accrual entitlement* tab whether and when it is to be reduced - for part-time employees, for example - and whether it is to be rounded. To do so, you assign an appropriate reduction or rounding rule. You can also set a maximum value that is not to be exceeded.

In the *Total entitlement* tab, you can also enter specifications regarding the total entitlement determined (rounding, maximum value).

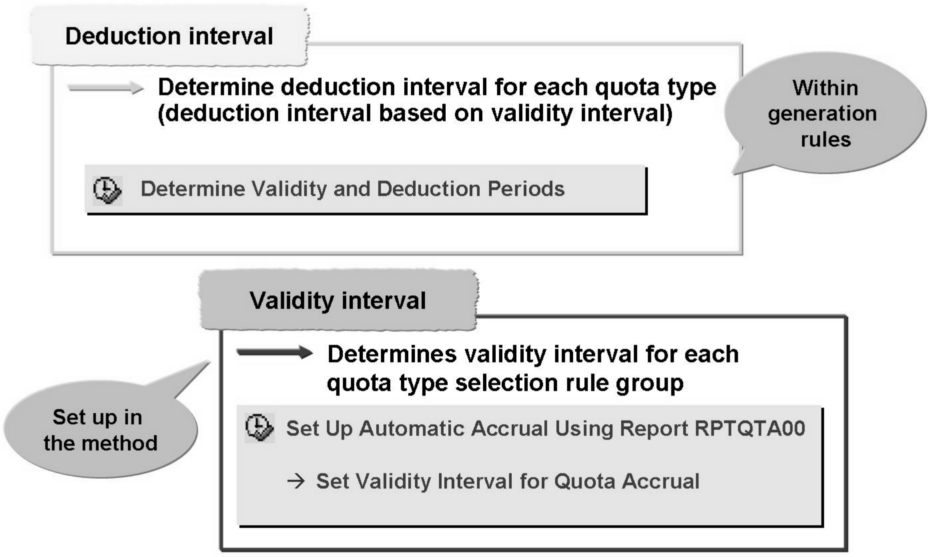

Figure 467: Deduction and Validity Intervals: Overview

The following slides show an overview of the Customizing steps in which you determine which quotas are accrued using the RPTQTA00 report or proposed in the *Absence Quotas* infotype (2006); the amounts, and validity and deduction intervals.

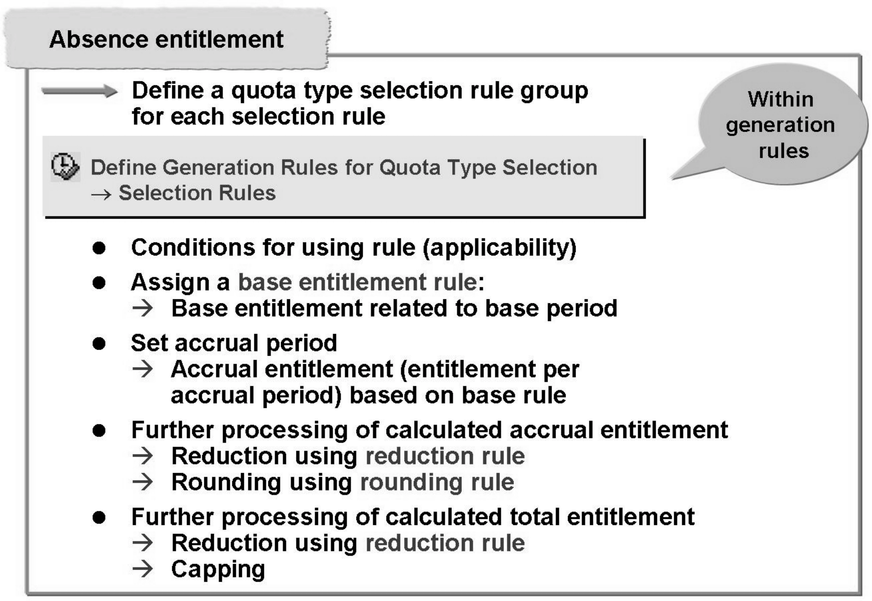

Figure 468: Generation Rules: Overview

If you want to accrue several quotas with different quota types for employees with a certain organizational assignment, you can specify several selection rules for the corresponding quota type selection rule group. In each of these selection rules,

you specify how quotas of a particular quota type are to be accrued depending on the specified conditions, taking the applicable rounding, capping, and reduction rules into account.

- **A new feature in SAP R/3 Enterprise is the option of using the RPTQUOTA_CHECK report to check your Customizing settings for quotas:**
- **Selection by:**
  - **Persons**
  - **Time management groupings**
- **Output of:**
  - **All applicable selection rules with**
  - **All Customizing settings for that selection rule**

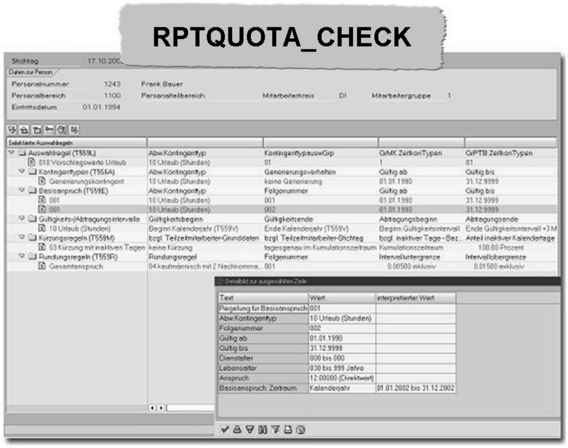

Figure 469: Checking Customizing Settings

You can use the RPTQUOTA_CHECK report to display an overview of your Customizing settings.

This gives you a quick overview for the settings you made for particular employees or groupings; you can also view detailed information.

To go to the detailed view of a setting, double-click on the sheet of paper icon for the row.

You can base the selection of the report either on persons, by entering a personnel number or quota type selection rule group, or time management groupings, by specifying employee subgroup or personnel subarea groupings.

The report outputs the applicable generation rule (from table T559L) and below it all the settings that were made in the individual rules. This includes the quota types (T556A), base entitlement (T559E), validity and deduction intervals (T559V), reduction rules (T559M), and rounding rules (T559R). In addition, the absences that may cause the quota to be reduced are displayed. (Indicated as such in quota generation in table T554S).

The report is shipped in HR Support Packages for earlier releases back to 4.6B. The changes for 4.6C are contained in HR Support Package 63.

For more information about the report see SAP Note 538504 and the report documentation. To display the documentation, access transaction **SA38** and choose *Goto → Documentation*.

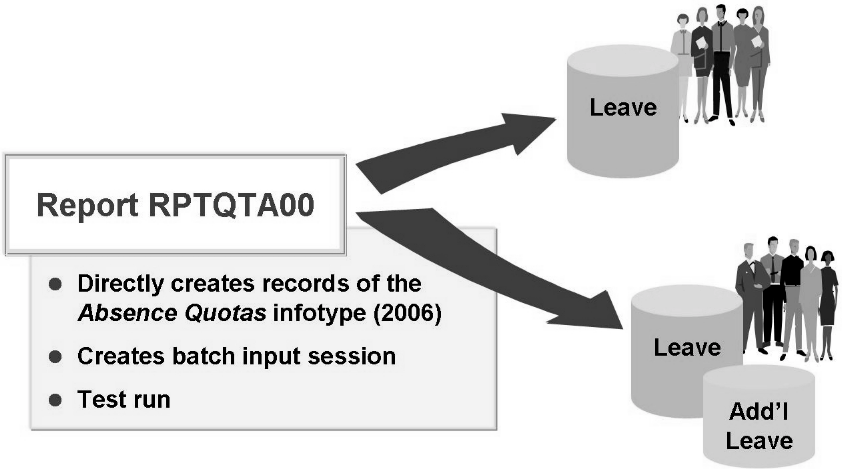

Figure 470: Report RPTQTA00 (Generate Absence Quotas)

If generation rules have been specified, you can use the RPTQTA00 report to accrue quota entitlements in advance for groups of employees or for individuals.

To do so, you must specify a generation interval to determine the validity period of the absence quota record or records to be created.

The following options are available for specifying the validity period:

You can enter the start and end dates directly in the report selection screen to set the validity interval.

You can enter the start date. The start date serves as the key date for determining the actual validity interval according to the validity interval specified in the IMG.

You can make no entries (neither start nor end date). The system date serves as the key date for determining the actual validity interval according to the entries in the *Validity Interval for Absence Quotas* Customizing table.

You run the RPTQTA00 report in one of the following ways:

It generates new infotype records directly in the *Absence Quotas* infotype or updates existing infotype records.

It generates a batch input session to be processed at a later time.

It is run in test mode. You can check the result in the output list.

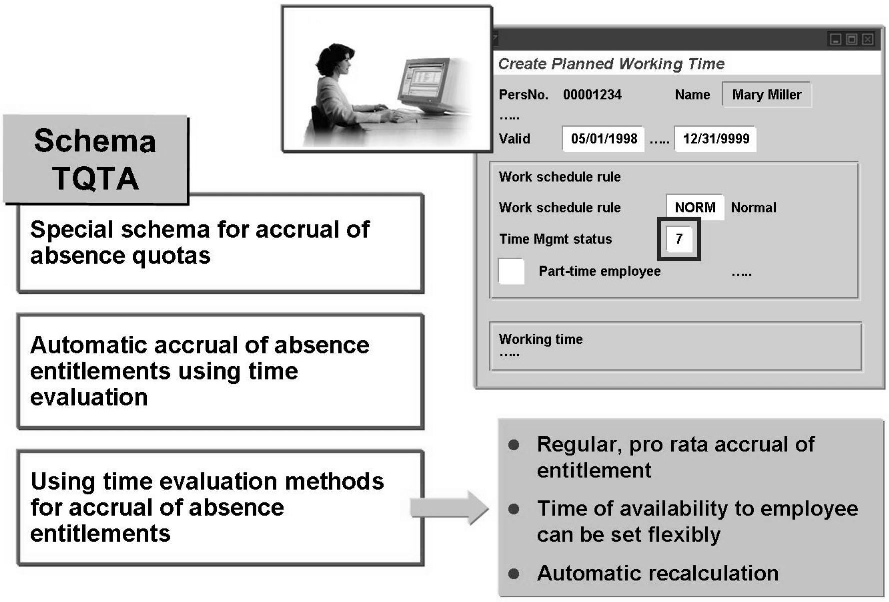

Figure 471: Schema TQTA

If you want to take advantage of time evaluation functions when generating absence entitlements, even if you do not otherwise use time evaluation, you can use the standard schema **TQTA**.

All employees for whom absence entitlements are to be accrued using this schema must have the Time Management status **7** in the *Planned Working Time* infotype (0007). In payroll, status **7** (*Time evaluation without payroll integration*) is handled as status **0** (*No time evaluation*) in time management.

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Exercise 37: Creating, Accruing, and Deducting from Quotas

Exercise Duration: 30 Minutes

Exercise Objectives

After completing this exercise, you will be able to:

- Create quota types
- Create and assign quota deduction rules
- Accrue absence entitlements

Business Example

You create the quota types required in your enterprise (leave, educational leave, and so on). The same leave entitlement is granted to all employees on an annual basis. The amount of entitlement is dependent on employees' seniority. You create the generation rules for accruing your employees' leave entitlement. When employees take leave, you must ensure that correct amounts are deducted from their entitlements, in the correct sequence, and so on. You create and assign the applicable quota deduction rules.

Hint: If the system asks you to enter a country grouping, enter **99 – Rest of world**.

Task 1:

Create an Absence Quota Type

1. Create quota type **30+##** (30 added to your group number) with the name **Leave Group ##** and quota type **70+##** (70 added to your group number) with the name **Additional leave Group ##**.

   The quotas are to be managed in days, and a deduction beyond the entitlement is not permitted.

   You can copy and modify quota type **09 (Leave (days))**.

Continued on next page

Task 2:

Setting Up Quota Deduction

Create and assign a quota deduction rule

When your employees take leave (absence type **LE##**), each leave quota must be deducted accordingly.

The following applies:

- If an employee is entitled to additional leave (quota type **70 + ##**), this quota is to be deducted first. Then, the actual leave (quota type **30 + ##**) is to be deducted. Other absence entitlements to which the employee may be entitled must not be deducted.
- If an employee has several quotas of the same type, then these quotas are to be deducted so that the quotas that would expire first (that is, their deduction end dates would be reached first) are also deducted first.
- The quotas must not be deducted beyond the entitlement. Where can you create a rule of this type?

1. Define a quota deduction rule **1##** (where ## = your group number), in which the sequence of the quotas to be deducted (first **70+##**, then **30+##**) is specified in a specific sequence. Make sure that no deduction from additional quotas is permitted.
2. Assign your quota deduction rule at the appropriate position. Where do you make this assignment? Make sure that all above conditions are met when assigning.
3. Activate and check quota deduction for **LE##**.

Task 3:

Accrual of Absence Entitlements (30+## = Standard Annual Leave)

Employees in your personnel subarea are granted their leave for one year in advance. This leave entitlement depends on their seniority. The entitlement is valid for the current year, however, leave can be taken in the subsequent year. In the following steps, you configure the system to accrue employees' leave entitlement automatically using the **RPTQTA00** report.

1. Indicate that your new absence quota type **Leave** is to be accrued manually, that is, not by using time evaluation.
2. Feature QUOMO

   What does the *QUOMO* feature do, that is, what is its function? What is the return value of the feature and where is this return value referenced?

Continued on next page

How is the decision tree of the QUOMO feature structured in the training system?

What return value applies to your employees Karin Anderson **(306992##)** and Tom Johnson **(306991##)**?

3. Specify base entitlements (30+##)

   Set up the following leave regulation for the employees in your personnel subarea:

   Employees with 0 – 5 years' seniority are entitled to 25 days of leave (quota type **30+##**) per year.

   Employees with more than 5 years' seniority are entitled to 28 days of leave (quota type **30+##**) per year.

   Create a base entitlement rule to represent these specifications and name it **001**. Do you need to create subrules? If so, use the subrules **001** and **002**.

   Use the calendar year as the period on which the base entitlement is based.

4. Define validity and deduction intervals (30+##)

   Use the current calendar year as the validity interval for the quota;

   the quota can be deducted from the start of the validity period until March 31 of the subsequent year. In addition, quota deduction cannot begin until after an employee's probationary period is completed.

   In which IMG steps do you specify the default values for the validity and deduction intervals? What are the intervals based on?

   The deduction interval is specified for each quota type. What about the validity interval?

5. Define reduction rules for quota entitlements (30+##)

   In the case of employees who join or leave the company mid-year, you want the default leave entitlement to be proportionately lower, that is, you want the entitlement to be reduced pro rata. Create an appropriate reduction rule **30+##** (where ## = your group number). Use an appropriate name for the reduction rule, such as **Reduced by inactive days Group ##**. Use the accrual period as the base period for reduction.

   Note:

   Confirm the warning concerning the SAP namespace in this exercise. A number is used here as the "name" of the reduction rule.

6. Define rounding rules for quota selection (30+##)

   You want to round up or down to full days when determining total entitlement. Does a suitable rounding rule already exist? Which one?

Continued on next page

7. Define generation rules for quota selection (30+##)

   You want to create a selection rule for quota accrual **30+## (Leave Group ##)** for the employees in your personnel area.

   What are the employee subgroup groupings and personnel subarea groupings called?

   Employee subgroup grouping for time quotas:

   Personnel subarea grouping for time quotas:

   Personnel subarea grouping for time recording: 01

   For which quota type selection rule group are the selection rule and generation rule valid?

   Check the decision tree for the QUOMO feature again.

   Write down the quota type selection rule group here:

   For the applicable groupings and quota type selection rule group, create the selection rule **001** and name it **Leave accrual ##**. This selection rule is to be used for accruing absence quota type **30+##** (where ## = your group number).

   The following specifications are valid for this selection rule:

   - It is to apply to all employees in your personnel subarea, regardless of their length of service with the company and challenge group/degree of challenge.
   - The accrual period is to be one calendar year.
   - Specify the rule for base entitlement that you created. Seniority is to be determined for an exact date.
   - Set up pro rata reduction of quota entitlement for employees joining or leaving the enterprise mid-year.
   - The total entitlement determined is to be rounded so that only full days are used.

Continued on next page

Task 4:

Accruing Additional Absence Quota Entitlements (70+## = Additional Leave)

The following exercise demonstrates how entitlements of different quota types can be accrued for employees.

In some countries, this is required. In Germany, for example, challenged employees are required to be granted additional leave based on their degree of challenge. In the USA, some employees are entitled to additional leave as part of workers' compensation.

Employees in your personnel areas are to be granted three days of additional leave per year (quota type 70+##, where ## = your group number).

1. Specify base entitlements (70+##)

   Create a base entitlement rule for quota type **70+##** (3 days' entitlement per calendar year). Name this base entitlement rule **001**. Do you need to create subrules?

   Use the calendar year as the period on which the base entitlement is based.

2. Define validity and deduction intervals (70+##)

   What validity interval is valid for the quota to be accrued? Deduction of the quota entitlement is to be permitted in the current year.

3. Define reduction and rounding rules for quota entitlements (70+##)

   In the case of employees who join or leave the company mid-year, you want the leave entitlement to be proportionately lower, that is, you want the entitlement to be reduced pro rata.

   You want to round up or down to full days when determining total entitlement.

4. Define generation rules for quota selection (70+##)

   Enter a selection rule with the ID **002** for accruing additional quota **70+##** (## = your group number). Name this selection rule, for example, **Accrual addl leave 70+##**.

   The following specifications are valid for this selection rule:

Continued on next page

- It is to apply to all employees in your personnel subarea, regardless of their length of service with the company and challenge group/degree of challenge.
- The accrual period is to be one calendar year.
- Specify the rule for base entitlement that you created.
- Set up pro rata reduction of quota entitlement for employees joining or leaving the enterprise mid-year.
- The total entitlement determined is to be rounded so that only full days are used.

5. Use RPTQUOTA_CHECK to check generation rules

   Use the RPTQUOTA_CHECK report to check your Customizing settings for Tom Johnson (306991##) and Karin Anderson (306992##).

   Display the error list and correct any errors in the settings as required.

Task 5:

Defining Quotas for Employees

1. Generate absence entitlements using RPTQTA00

   For your employees Tom Johnson (**306991##**) and Karin Anderson (**306992##**), generate a leave quota for the current year by running the **RPTQTA00** report. Choose the *Generate batch input session* option.
2. Manually create absence entitlements without default values (**optional**)

   If you have already completed Exercise 4, you can skip this exercise, or manually create a quota for the following year.

   Your salaried employee Karin Johnson (306992##) is entitled to 3 days of additional leave (quota type 70+##).

   For your salaried employee, manually create an entitlement of 3 days of additional leave (quota type 70 ##). The validity interval for this quota is the current year. The start and end of the deduction period is the same as the start and end of the validity period.

Task 6:

Representing Employees’ Leave

1. Create a full week’s leave for your salaried employee, Karin Anderson (**306992##**), next week. Enter the leave record using the absence type **LE##**.

   Note:

Continued on next page

If you want to enter the leave record in the Time Manager's Workplace, use the generic time data ID **AB**, then enter the absence type **LE##** (## = your group number) in the Details area.

What amount of quota is used?

2. From which quotas is the leave deducted?

Now check the quota overview for your salaried employee for the current year.

Solution 37: Creating, Accruing, and Deducting from Quotas

Task 1:

Create an Absence Quota Type

1. Create quota type **30+##** (30 added to your group number) with the name **Leave Group ##** and quota type **70+##** (70 added to your group number) with the name **Additional leave Group ##**.

   The quotas are to be managed in days, and a deduction beyond the entitlement is not permitted.

Continued on next page

You can copy and modify quota type **09 (Leave (days))**.

a) Define groupings for time quotas

In the Implementation Guide (IMG), choose *Personnel Time Management → Time Data Recording and Administration → Managing Time Accounts Using Attendance/Absence Quotas → Setting Groupings for Time Quotas* and then the following steps as indicated:

- To check the assignment of employee subgroups to the grouping for time quotas, choose *Group Employee Subgroups for Time Quotas*.

  Make sure that your employees' employee subgroups, **X0 (Salaried employee)** and **X1 (Hourly-wage earner)**, are both assigned to the grouping **1**.

- To check the assignment of personnel subareas to the grouping for time quotas, choose *Group Personnel Subareas for Time Quotas*.

  Check whether your personnel subarea **TP##** is assigned to the grouping **01**.

b) Create absence quota types

In the Implementation Guide (IMG), choose *Personnel Time Management → Time Data Recording and Administration → Managing Time Accounts Using Attendance/Absence Quotas → Time Quota Types → Define Absence Quota Types*.

Select the time quota type **09 (Leave (days))** and then choose **Copy**, or choose ***Edit → Copy as*** from the menu.

For the employee subgroup grouping for time quotas **1** and the personnel subarea grouping for time quota types **01**, enter the first absence quota type **30+##** named **Leave Group ##** and the second absence quota type **70+##** named **Additional leave Group ##** (## = your group number).

Leave the unit of time/measurement *Days* and the existing time constraint class as they are.

Do not enter anything in the *Negative deduction to* field. Quotas of the new time quota type must not be able to be deducted beyond the entitlement.

Save your entries.

Task 2:

Setting Up Quota Deduction

Continued on next page

Create and assign a quota deduction rule

When your employees take leave (absence type **LE##**), each leave quota must be deducted accordingly.

The following applies:

- If an employee is entitled to additional leave (quota type **70 + ##**), this quota is to be deducted first. Then, the actual leave (quota type **30 + ##**) is to be deducted. Other absence entitlements to which the employee may be entitled must not be deducted.
- If an employee has several quotas of the same type, then these quotas are to be deducted so that the quotas that would expire first (that is, their deduction end dates would be reached first) are also deducted first.
- The quotas must not be deducted beyond the entitlement. Where can you create a rule of this type?

1. Define a quota deduction rule **1##** (where ## = your group number), in which the sequence of the quotas to be deducted (first **70+##**, then **30+##**) is specified in a specific sequence. Make sure that no deduction from additional quotas is permitted.

   a) Create and assign a quota deduction rule

   Before you can deduct from quotas, you must first create an appropriate quota deduction rule. This rule is then assigned to a counting rule.

   Create a quota deduction rule

   To create a quota deduction rule, choose *Personnel Time Management → Time Data Recording and Administration → Managing Time Accounts Using Attendance/Absence Quotas → Quota Deduction Using Attendances/Absences → Define Deduction Rules for Absence and Attendance Quotas* in the IMG.

   In the subsequent dialog box, choose the *Define Deduction Rules for Absence Quotas* activity.

   Choose the *New entries* option, or choose *Edit → New entries*.

   Make the following entries for the deduction rule you are creating:

   Start Date: **01/01/1990**

   End Date: **12/31/9999**

   Employee Subgroup Grouping for Time Quota Types: **1**

   Personnel Subarea Grouping for Time Quota Types: **01**

   Deduction rule: **1##** (Deduction rule group ##)

Continued on next page

Unit of relevant absence quota types: **Days**

In the *Absence quota types* section:

70+## in the first row

30+## in the row below it.

In the *Quota type sequence for further deduction* section, choose the *No further deduction* option.

In the *Deduction priority* section, enter **1** as the priority for *Quota types*, and **2** as the priority for *Deduction to*. Leave the default value a*scending* for the sequence.

Save your entries.

2. Assign your quota deduction rule at the appropriate position. Where do you make this assignment? Make sure that all above conditions are met when assigning.

   a) Assign the quota deduction rule to a counting rule

      To assign the quota deduction rule to a counting rule, choose *Personnel Time Management → Time Data Recording and Administration → Managing Time Accounts Using Attendance/Absence Quotas → Quota Deduction Using Attendances/Absences → Assign Deduction Rules to Counting Rules* in the IMG.

      Select the counting rule **1##** that you created in Exercise 1 of the previous unit, and choose *Details* (second button from the left in the icon bar) or *Goto → Details* from the menu.

      Scroll to the end of the counting rule.

      In both the *Deduction rule* and *Absence quotas* sections, enter the quota deduction rule **1##** that you just created (## = your group number). Specify the quota deduction rule only in the *Within entitlement* fields. This makes sure that the quotas are not deducted beyond the available entitlement.

      Save your entries.

Continued on next page

3. Activate and check quota deduction for **LE##**.

   a) Activate quota deduction for an absence type

      To activate and check quota deduction for the applicable absence type **LE##** (## = your group number), choose *Personnel Time Management → Time Data Recording and Administration → Absences → Absence Catalog → Absence Counting → Assign Counting Rules to Absence Types* in the IMG.

      Select the absence type you previously created, **LE## (Leave Group ##)**, and the choose *Details* button or *Goto → Details* from the menu. Check whether your counting rule **1##** is assigned to this absence type and if quota deduction is already activated. You should have already done this in Exercise 1 of the previous unit.

Task 3:

Accrual of Absence Entitlements (30+## = Standard Annual Leave)

Employees in your personnel subarea are granted their leave for one year in advance. This leave entitlement depends on their seniority. The entitlement is valid for the current year, however, leave can be taken in the subsequent year. In the following steps, you configure the system to accrue employees' leave entitlement automatically using the **RPTQTA00** report.

1. Indicate that your new absence quota type **Leave** is to be accrued manually, that is, not by using time evaluation.

   a) In the IMG, choose *Personnel Time Management → Time Data Recording and Administration → Managing Time Accounts Using Attendance/Absence Quotas → Calculating Absence Entitlements → Automatic Accrual of Absence Quotas → Permit Quota Generation Without Time Evaluation*.

      Check if the *No generat.* option is selected for your time quota type **30+## Leave**.

2. Feature QUOMO

   What does the *QUOMO* feature do, that is, what is its function? What is the return value of the feature and where is this return value referenced?

   How is the decision tree of the QUOMO feature structured in the training system?

Continued on next page

What return value applies to your employees Karin Anderson **(306992##)** and Tom Johnson **(306991##)**?

a) Function of the QUOMO feature:

The QUOMO feature specifies which quota type selection rule group employees are to be assigned to depending on their organizational assignment. Quota type selection rules will be specified for this quota type selection rule group in a later step to specify how absence quotas are accrued.

Note:

The quota type selection rule group can also be assigned in the time evaluation schema if time evaluation is used to accrue absence entitlements.

b) Structure of the decision tree of the QUOMO feature in the training system:

In the IMG, choose *Personnel Time Management → Time Data Recording and Administration → Managing Time Accounts Using Attendance/Absence Quotas → Calculating Absence Entitlements → Rules for Generating Absence Quotas → Specify Rule Groups for Quota Type Selection*.

In the subsequent dialog box, choose the *Modify Feature QUOMO* option.

The decision tree for the QUOMO feature appears.

Note:

You can also maintain the feature directly by accessing transaction **PE03**.

Note:

The decision tree of the feature is already modified for the following exercise as follows:

In the decision tree, the country grouping is queried first. For the country grouping **99 (Rest of world)**, the system then queries the personnel area.

The personnel subarea is then queried for the personnel area **CABB**.

The return value **##+30** is set for the country grouping **99**, personnel area **CABB** and the personnel subarea **TP##** (## = your group number). This means that the quota type selection rule group **##+30** (you're your group number) applies to the employees in personnel subarea **TP##**.

3. Specify base entitlements (30+##)

Continued on next page

Set up the following leave regulation for the employees in your personnel subarea:

Employees with 0 – 5 years' seniority are entitled to 25 days of leave (quota type **30+##**) per year.

Employees with more than 5 years' seniority are entitled to 28 days of leave (quota type **30+##**) per year.

Create a base entitlement rule to represent these specifications and name it **001**. Do you need to create subrules? If so, use the subrules **001** and **002**.

Use the calendar year as the period on which the base entitlement is based.

a) In the IMG, choose *Personnel Time Management → Time Data Recording and Administration → Managing Time Accounts Using Attendance/Absence Quotas → Calculating Absence Entitlements → Rules for Generating Absence Quotas → Define Base Entitlements*.

   In the subsequent dialog box, choose the *Base Entitlement for Absence Quota Generation* activity.

   To create new rules for base entitlements, choose *New entries* or *Edit → New entries* from the menu.

   Create a base entitlement rule **001** for the quota type **30+## Leave group ##** and call it **Base entitlement leave group ##**. You have to create two subrules (**001** and **002**) because your employees have different base entitlements depending on their level of seniority.

   - Base entitlement for employees with 0 - 5 years' seniority

     Make the following entries for the first subrule **001**:

     Start Date: **01/01/1990**

     End Date: **12/31/9999**

     Employee subgroup grouping for time quotas: **1**

     Personnel subarea grouping for time quotas: **01**

     Personnel subarea grouping for time recording: **01**

     Absence quota type: **30+##**

     Rule for base entitlement: **001**

     Sequential number: **001**

     Seniority: **0 – 5 years**

     Entitlement – Constant: **25 (days)**

     Related to period: **Calendar year**

Continued on next page

Save your entries and return by choosing *Back*.

- Base entitlement for employees with seniority of more than 5 years

  To create subrule **002**, select your entry for quota type **30+##** and then choose *Copy*.

  Make the following changes:

  Sequential number: **002**

  Seniority: **5 – 99 years**

  Entitlement – Constant: **28 days**

  Related to period: **Calendar year**

  Choose *Enter* to confirm your entries and then *Back*.

4. Define validity and deduction intervals (30+##)

   Use the current calendar year as the validity interval for the quota;

   the quota can be deducted from the start of the validity period until March 31 of the subsequent year. In addition, quota deduction cannot begin until after an employee's probationary period is completed.

   In which IMG steps do you specify the default values for the validity and deduction intervals? What are the intervals based on?

   The deduction interval is specified for each quota type. What about the validity interval?

   a) Define validity interval

      To determine the validity intervals for the quota entitlements, choose *Personnel Time Management → Time Data Recording and Administration → Managing Time Accounts Using Attendance/Absence Quotas → Calculating Absence Entitlements → Rules for Generating Absence Quotas → Setting Up Methods for Quota Accrual → Set Up Automatic Accrual Using RPTQTA00* in the IMG.

      In the following dialog box, choose the *Set Validity Interval for Quota Accrual* activity.

      Choose *New entries* and enter the following data:

      Employee subgroup grouping for time quotas: **1**

      Personnel subarea grouping for time quotas: **01**

      Quota type selection rule grouping: **30+##**

      Valid from date: **Start of calendar year**

Continued on next page

Valid to date: **End of calendar year**

Save your entries.

Note:

The validity interval for the quota to be accrued is defined for a quota type selection rule group, that is, the same validity interval is the default for all quotas with this quota type selection rule group (according to rules).

b) Define deduction interval

To determine deduction interval for the quota **30+## Leave group ##**, choose *Personnel Time Management → Time Data Recording and Administration → Managing Time Accounts Using Attendance/Absence Quotas → Calculating Absence Entitlements → Rules for Generating Absence Quotas → Determine Validity and Deduction Periods*.

Choose *New entries* and enter the following data:

Employee subgroup grouping for time quotas: **1**

Personnel subarea grouping for time quota types: **01**

Absence quota type **30+##**

Deduction interval:

Deduction from: **Start of validity interval**

No deduction before: **Probationary period completed**

Deduction to: **End of validity interval**

Relative position: **3 months**

Save your entries.

Note:

Unlike the validity interval, the deduction interval is determined for each quota type. In this way, a deduction interval can be set for individual quota types.

5. Define reduction rules for quota entitlements (30+##)

In the case of employees who join or leave the company mid-year, you want the default leave entitlement to be proportionately lower, that is, you want the entitlement to be reduced pro rata. Create an appropriate reduction rule **30+##** (where ## = your group number). Use an appropriate name for the reduction rule, such as **Reduced by inactive days Group ##**. Use the accrual period as the base period for reduction.

Note:

Continued on next page

Confirm the warning concerning the SAP namespace in this exercise. A number is used here as the “name” of the reduction rule.

a) Define reduction rules for quota entitlements (30+##)

   To define the applicable reduction rule for quota entitlements, choose *Personnel Time Management → Time Data Recording and Administration → Managing Time Accounts Using Attendance/Absence Quotas → Calculating Absence Entitlements → Rules for Generating Absence Quotas → Define Rules for Reducing Quota Entitlements* in the IMG.

   In the subsequent dialog box, choose the *Define Reduction Rules* activity.

   Choose *New entries*.

   Enter the following data:

   Reduction rule 30+##(Reduction rule for inactive days group ##)

   Reduction rule for part-time employees:

   Basic data: **No reduction**

   Reduction rule for inactive days:

   Reference period: **Accrual period**

   Percentage of inactive calendar days: **0%**

   From percentage: **Proportionate reduction**

   Save your entries. Confirm the warning message by choosing *Enter*.

   Note:

   Choose *Enter* to confirm the warning concerning the SAP namespace in this exercise. A number is used here as the “name” of the reduction rule.

6. Define rounding rules for quota selection (30+##)

Continued on next page

You want to round up or down to full days when determining total entitlement. Does a suitable rounding rule already exist? Which one?

a) Define rounding rules for quota entitlements (30+##)

To check whether an appropriate rounding rule already exists to round up or down to whole values, choose *Personnel Time Management → Time Data Recording and Administration → Managing Time Accounts Using Attendance/Absence Quotas → Calculating Absence Entitlements → Rules for Generating Absence Quotas → Define Rules for Rounding Quota Entitlements* in the IMG.

The rounding rule **01** corresponds to the specifications required: You can round up and down to whole values.

7. Define generation rules for quota selection (30+##)

You want to create a selection rule for quota accrual **30+## (Leave Group ##)** for the employees in your personnel area.

What are the employee subgroup groupings and personnel subarea groupings called?

Employee subgroup grouping for time quotas:

Personnel subarea grouping for time quotas:

Personnel subarea grouping for time recording: 01

For which quota type selection rule group are the selection rule and generation rule valid?

Check the decision tree for the QUOMO feature again.

Write down the quota type selection rule group here:

For the applicable groupings and quota type selection rule group, create the selection rule **001** and name it **Leave accrual ##**. This selection rule is to be used for accruing absence quota type **30+##** (where ## = your group number).

The following specifications are valid for this selection rule:

Continued on next page

- It is to apply to all employees in your personnel subarea, regardless of their length of service with the company and challenge group/degree of challenge.
- The accrual period is to be one calendar year.
- Specify the rule for base entitlement that you created. Seniority is to be determined for an exact date.
- Set up pro rata reduction of quota entitlement for employees joining or leaving the enterprise mid-year.
- The total entitlement determined is to be rounded so that only full days are used.

a) Define generation rules for quota selection (30+##)

Note:

The QUOMO feature (see 2-2) is used to determine – based on employees' organizational assignment – the quota type selection rule group that is to apply to the employees. Selection rules are then stored for this quota type selection rule group to regulate the quota accrual.

For this reason, check the decision tree for the QUOMO feature to see which quota type selection rule group was set for the employees in your personnel subarea. The quota type selection rule group should be **30+##** (## = your group number). (To access the decision tree of the QUOMO feature in the IMG, choose *Personnel Time Management → Time Data Recording and Administration → Managing Time Accounts Using Attendance/Absence Quotas → Calculating Absence Entitlements → Rules for Generating Absence Quotas → Specify Rule Groups for Quota Type Selection*.)

To specify the generation rules for quota accrual in the IMG, choose *Personnel Time Management → Time Data Recording and Administration → Managing Time Accounts Using Attendance/Absence Quotas → Calculating Absence Entitlements → Rules for Generating Absence Quotas → Define Generation Rules for Quota Type Selection*.

Choose *New entries* and enter the following data:

Start Date: **01/01/1990**

End Date: **12/31/9999**

Employee subgroup grouping for time quotas: 1

Personnel subarea grouping for time quotas: **01**

Personnel subarea grouping for time recording: **01**

Quota type selection rule group: **30+##**

Continued on next page

Selection rule: **001** (Leave accrual ##)

Absence quota type: **30+## (Leave Group ##)**

- In the *Base Entitlement* tab page, enter:

  Rule for base entitlement: **001**

  Key date for determining seniority: **Exact date**

- In the *Applicability* tab, adopt the default settings.
- In the *Accrual period* tab, select *Calendar year*.
- In the *Accrual entitlement* tab, enter:

  Reduction rule: **30+##**

- In the *Total entitlement* tab, enter:

  Rounding rule: **01**

Save your entries.

Note:

Using the dialog structure in the left section of the screen, you can access the relevant views for generation rules.

Task 4:

Accruing Additional Absence Quota Entitlements (70+## = Additional Leave)

The following exercise demonstrates how entitlements of different quota types can be accrued for employees.

In some countries, this is required. In Germany, for example, challenged employees are required to be granted additional leave based on their degree of challenge. In the USA, some employees are entitled to additional leave as part of workers' compensation.

Employees in your personnel areas are to be granted three days of additional leave per year (quota type 70+##, where ## = your group number).

1. Specify base entitlements (70+##)

   Create a base entitlement rule for quota type **70+##** (3 days' entitlement per calendar year). Name this base entitlement rule **001**. Do you need to create subrules?

Continued on next page

Use the calendar year as the period on which the base entitlement is based.

a) Specify base entitlements (70+##)

In the IMG, choose *Personnel Time Management → Time Data Recording and Administration → Managing Time Accounts Using Attendance/Absence Quotas → Calculating Absence Entitlements → Rules for Generating Absence Quotas → Define Base Entitlements*.

In the subsequent dialog box, choose the *Base Entitlement for Absence Quota Generation* activity.

To create new rules for base entitlements, choose *New entries* or *Edit → New entries* from the menu.

- Define base entitlements

  In this activity, you create a base entitlement rule 001 for the quota type **70+## Leave group ##** and call it **Base entitlement addl leave group ##**. This rule contains no subrules.

  Make the following entries for rule **001**:

  Start Date: **01/01/1990**

  End Date: **12/31/9999**

  Employee subgroup grouping for time quotas: **1**

  Personnel subarea grouping for time quotas: **01**

  Personnel subarea grouping for time recording: **01**

  Absence quota type: **70+##**

  Rule for base entitlement: **001**

  Sequential number: **-**

  Entitlement – Constant: **3 days**

  Related to period: **Calendar year**

  Save your entries and return by choosing *Back*.

2. Define validity and deduction intervals (70+##)

Continued on next page

What validity interval is valid for the quota to be accrued? Deduction of the quota entitlement is to be permitted in the current year.

a) Define validity interval

Because the validity interval is set for each quota type selection rule group, and you have already done this in 2-4, you do not have to make any other entries.

b) Define deduction interval

To determine deduction interval for the quota **70+## Additional Leave)**, choose *Personnel Time Management → Time Data Recording and Administration → Managing Time Accounts Using Attendance/Absence Quotas → Calculating Absence Entitlements → Rules for Generating Absence Quotas → Determine Validity and Deduction Periods*.

Choose *New entries* and enter the following data:

Employee subgroup grouping for time quotas: **1**

Personnel subarea grouping for time quotas: **01**

Absence quota type **70+##**

Deduction interval:

Deduction from: **Start of validity interval**

Deduction to: **End of validity interval**

Rel. position: **-**

Save your entries.

3. Define reduction and rounding rules for quota entitlements (70+##)

In the case of employees who join or leave the company mid-year, you want the leave entitlement to be proportionately lower, that is, you want the entitlement to be reduced pro rata.

You want to round up or down to full days when determining total entitlement.

a) Use the reduction and rounding rules that you already created in 2-5 and 2-6.

Reduction rule: **30+## (Reduction rule for inactive days group ##)**

Rounding rule: **01 Rounding rule: To nearest whole number**

4. Define generation rules for quota selection (70+##)

Continued on next page

Enter a selection rule with the ID **002** for accruing additional quota **70+##** (## = your group number). Name this selection rule, for example, **Accrual addl leave 70+##**.

The following specifications are valid for this selection rule:

Continued on next page

- It is to apply to all employees in your personnel subarea, regardless of their length of service with the company and challenge group/degree of challenge.
- The accrual period is to be one calendar year.
- Specify the rule for base entitlement that you created.
- Set up pro rata reduction of quota entitlement for employees joining or leaving the enterprise mid-year.
- The total entitlement determined is to be rounded so that only full days are used.

a) In the IMG, choose *Personnel Time Management → Time Data Recording and Administration → Managing Time Accounts Using Attendance/Absence Quotas → Calculating Absence Entitlements → Rules for Generating Absence Quotas → Define Generation Rules for Quota Type Selection*.

Choose *New entries* and enter the following data:

Start Date: **01.01.1990**

End Date: **12/31/9999**

Employee subgroup grouping for time quotas: **1**

Personnel subarea grouping for time quotas: **01**

Personnel subarea grouping for time recording: **01**

Quota type selection rule group: **30+##**

Selection rule: **002** (Accrual of additional leave)

Absence quota type: **70+##** (Additional leave)

- In the *Base Entitlement* tab page, enter:

  Rule for base entitlement: **001**
- In the *Applicability* tab, adopt the default settings.
- In the *Accrual period* tab, select *Calendar year*.
- In the *Accrual entitlement* tab, enter: Reduction rule: **30+##**
- In the *Total entitlement* tab, enter: Rounding rule: **01**

  Save your entries.

5. Use RPTQUOTA_CHECK to check generation rules

Use the RPTQUOTA_CHECK report to check your Customizing settings for Tom Johnson (306991##) and Karin Anderson (306992##).

Continued on next page

Display the error list and correct any errors in the settings as required.

a) To access the report, choose the menu path *System* → *Services* → *Reporting* or go to transaction *SE38*. Enter the report name **RPTQUOTA_CHECK** and choose *Execute*.

In the report selection screen, choose selection *by personnel number*, and enter the first personnel number, **306991##** (Tom Johnson).

In the *Selection of Quotas* section, select generation by RPTQTA00 report and default values.

Execute the report.

Check the settings in the report output. Choose the *Error List* button to display any errors.

If there are errors, correct them in the Implementation Guide.

Repeat the process for your second personnel number, **306992##** (Karin Anderson).

Task 5:

Defining Quotas for Employees

1. Generate absence entitlements using RPTQTA00

For your employees Tom Johnson (**306991##**) and Karin Anderson (**306992##**), generate a leave quota for the current year by running the **RPTQTA00** report. Choose the *Generate batch input session* option.

a) Generate absence entitlements using RPTQTA00

In the IMG, choose *Personnel Time Management* → *Time Data Recording and Administration* → *Managing Time Accounts Using Attendance/Absence Quotas* → *Calculating Absence Entitlements* → *Setting Up Methods for Quota Accrual* → *Set Up Automatic Accrual Using Report RPTQTA00*.

In the subsequent dialog box, choose the *Set Up Report Variants for Absence Quota Accrual* activity.

The RPTQTA00 report is preset in the following screen.

Choose the *Execute* button or the menu path *Program* → *Execute*.

In the selection screen for the report, choose the following options:

Period: **Current year**

Selection:

EmployeeID **306991##** and **306992##** (## = your group number)

Continued on next page

Generation type: **Batch input**

Choose the *Execute* button or the menu path *Program → Execute*.

For employees to receive their leave entitlements, you have to run the generated batch input session.

To do so, choose *System → Services → Batch Input → Sessions*.

In the subsequent screen, select the session you created and choose *Process session*.

In the subsequent dialog box, choose the *Display errors only* option and confirm by choosing *Enter*.

The batch input session runs and generates leave entitlement for the appropriate employees.

To check the leave entitlement, choose *Human Resources → Time Management → Administration → Time Data → Display* from the menu.

Enter the personnel number of one of your employees (**306991##** or **306992##**) or use the possible entries help.

In the *Time Quotas* tab, select the *Absence quotas* option; choose *Current year* as the period.

Choose the *Overview* button.

The employee's leave entitlement ought to be listed.

Similarly, check the leave entitlement of your second employee.

2. Manually create absence entitlements without default values (**optional**)

   If you have already completed Exercise 4, you can skip this exercise, or manually create a quota for the following year.

   Your salaried employee Karin Johnson (306992##) is entitled to 3 days of additional leave (quota type 70+##).

Continued on next page

For your salaried employee, manually create an entitlement of 3 days of additional leave (quota type 70 ##). The validity interval for this quota is the current year. The start and end of the deduction period is the same as the start and end of the validity period.

a) Manually create absence entitlements without default values (optional)

Choose ***Human Resources → Time Management → Administration → Time Data → Maintain***.

Enter personnel number **306992##** (## = your group number) for your salaried employee in the *Personnel No.* field or use the possible entries help.

From the *Time Quotas* tab, choose the *Absence quotas* option. Choose *Current year* as the period.

Choose the **Create** button, or ***Edit → Create*** from the menu.

In the *Create Absence Quotas* screen (infotype 2006), enter quota type **70+## Additional leave** in the *Type* field.

In the *Number* field, enter **3** (for 3 days).

Make no entries in the *Deduction from and Deduction to fields because the deduction interval is to be the same as the validity interval.*

Save your entries.

Task 6:

Representing Employees' Leave

1. Create a full week's leave for your salaried employee, Karin Anderson (**306992##**), next week. Enter the leave record using the absence type **LE##**.

   Note:

   If you want to enter the leave record in the Time Manager's Workplace, use the generic time data ID **AB**, then enter the absence type **LE##** (## = your group number) in the Details area.

Continued on next page

What amount of quota is used?

a) Using infotype maintenance:

To create the absence *Leave* for your employees in the system, choose *Human Resources → Time Management → Administration → Time Data → Maintain*.

In the *Personnel number* field, enter **306992##** as the personnel number for your salaried employee or use the possible entries help.

In the *Working Times* tab, choose the *Absences* option and enter the absence type **LE## (Leave Group ##)** in the *STy* field.

In the *Period* section, enter the start date of the absence as the Monday of the following week, and the end date of the absence the Friday of that week in the *Period from* and *To* fields.

Choose the **Create** button, or ***Edit → Create*** from the menu.

The payroll days are displayed in the *Quota used* field.

Choose *Goto → Deduction* to check the quotas from which the absence was deducted for this period.

Save your entries.

Using the Time Manager's Workplace:

To access the *Time Manager's Workplace*, choose *Human Resources → Time Management → Administration → Time Manager's Workplace*.

To add Karin Anderson (**306992##**) temporarily to the employee list, click on the *Employee List* button in the *Employee List* screen area, and choose *Temporarily insert employee*. Enter the personnel number **306992##** (## = your group number) for Karin Anderson and then choose *Enter*.

In the *Time Data* area, choose *Create details* (second button from the left). Enter the time data ID **AB** in the *Details* area and the corresponding period (Monday through Friday of the following week). Enter **LE##** (## = your group number) as the absence type.

Save your entries.

2. From which quotas is the leave deducted?

Continued on next page

Now check the quota overview for your salaried employee for the current year.

a) To display the quota overview for your salaried employee, choose *Human Resources → Time Management → Administration → Time Data → Quota Overview*.

   In the *Personnel number* field, enter the personnel number of your salaried employee.

   In the *Selection dates* tab, choose the *Calendar year* option in the *Selection intervals* section.

   Choose the *Absence Quotas* tab and check which quotas exist and which have already been used.

Lesson Summary

You should now be able to:

- Describe the methods for accrual of attendance and absence quotas
- Determine default values to accrue quota entitlements

Lesson: Quota Compensation

825

Lesson Duration: 15 Minutes

Lesson Overview

In this lesson, you learn about the quota overview and quota compensation.

Lesson Objectives

After completing this lesson, you will be able to:

- Use the quota overview
- Explain how quota entitlements are compensated

For more information, see the Instructor Guide in SAPNet.

Business Example

You can also remunerate employees for remaining unused absence entitlements.

Quota Overview

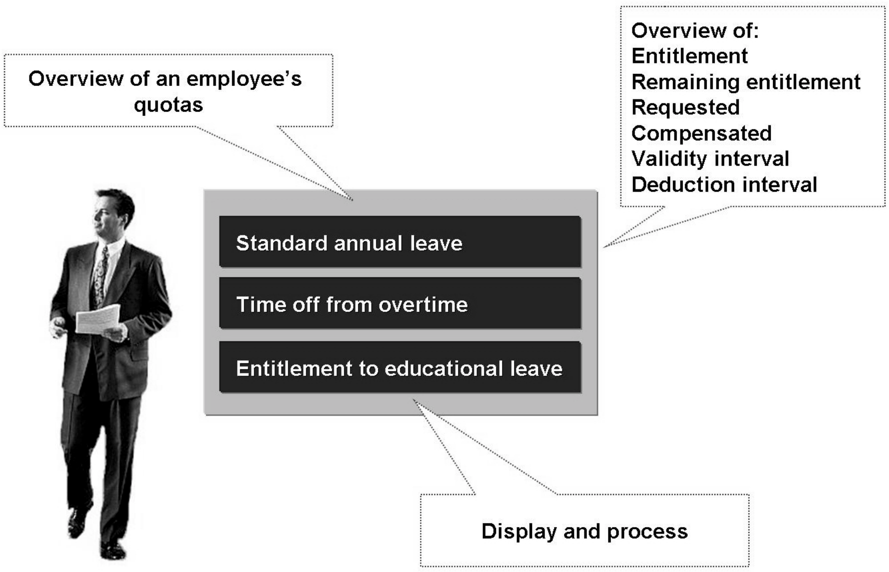

Figure 472: Quota Overview

You can access the quota overview from the *Time data* menu. You can use this function to maintain or display an employee's attendance and absence quotas.

The quota overview allows you to display or maintain the quotas that are assigned to an employee in a particular period. The overview includes the total entitlement, requested and remaining days, validity interval, and deduction interval of the quota, as well as an indicator showing whether the entitlement was accrued manually or automatically.

In the quota overview, you can select a row containing a quota and display more detailed information.

You can correct the manually recorded quotas (that is, those that are not accrued in time evaluation). You can also delete manually recorded quotas.

You can branch to the list overview to display or maintain the attendances/absences to be deducted.

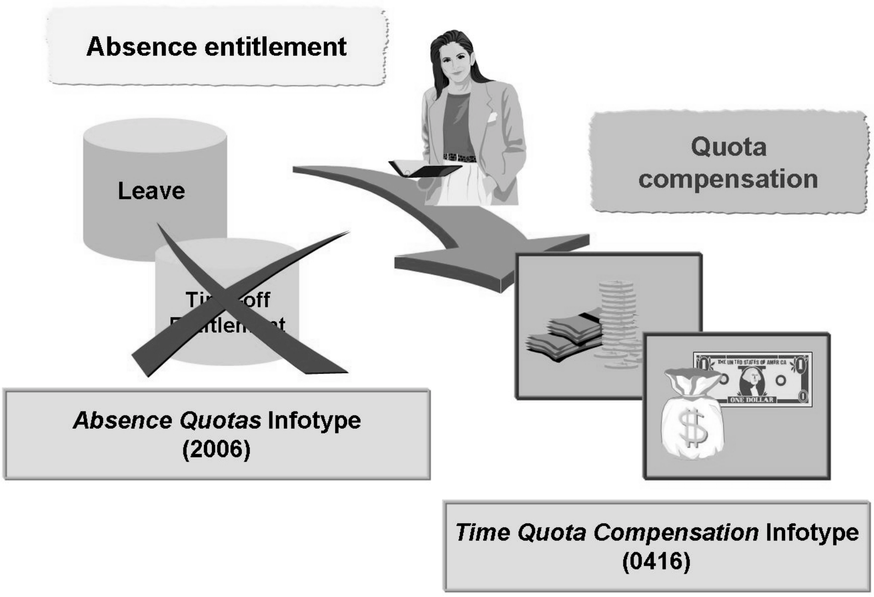

Figure 473: Quota Compensation

In the *Quota Compensation* infotype (0416), you can remunerate employees for remaining absence entitlements that were not used up by absences.

To compensate quotas, you specify various methods in Customizing that simplify recording of quota compensation. Three different processes for deduction are available:

Deduction according to an absence quota deduction rule for several absence quotas

Deduction of all absence quotas of one type that are deductible as of a key date for compensation

Deduction of absence quotas recorded manually

In addition to determining which quotas are to be compensated, the amount of the compensation must also be determined. You have to assign an appropriately configured wage type for valuation in payroll.

When compensation records are entered, the quota or quotas to be compensated are reduced by the specified value. The changes made to the quota remainder are indicated directly in the infotype.

Records of the *Quota Compensation* infotype are valuated directly in the gross part of payroll.

Facilitated Discussion

Discussion Questions

Use the following questions to engage the participants in the discussion. Feel free to use your own additional questions.

Lesson Summary

You should now be able to:

- Use the quota overview
- Explain how quota entitlements are compensated

Unit Summary

You should now be able to:

- Set up attendance and absence quota types
- Set up deduction from quota entitlements
- Describe the methods for accrual of attendance and absence quotas
- Determine default values to accrue quota entitlements
- Use the quota overview
- Explain how quota entitlements are compensated

831

Test Your Knowledge

1. The validity of a quota specifies the period in which employees can use the quota.

   Determine whether this statement is true or false.

   □ True

   □ False

2. Quota deduction has to be activated for the relevant absence or attendance types.

   Determine whether this statement is true or false.

   □ True

   □ False

3. Quota entitlements can be filled using generation rules or default values.

   Determine whether this statement is true or false.

   □ True

   □ False

4. A quota compensation reduces the remaining entitlement for a quota.

   Determine whether this statement is true or false.

   □ True

   □ False

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Answers

1. The validity of a quota specifies the period in which employees can use the quota.

   Answer: False

   The deduction interval (deduction from and to) determines the period in which the quota can be used. The deduction interval need not be the same as the validity period.

2. Quota deduction has to be activated for the relevant absence or attendance types.

   Answer: True

   Quota deduction has to be activated for, and a counting rule assigned to, each attendance or absence type that is to be deducted from a quota.

3. Quota entitlements can be filled using generation rules or default values.

   Answer: True

   Rules are used for generating quota accrual using the RPTIME00 and RPTQTA00 reports. Default values are used when entering data manually.

4. A quota compensation reduces the remaining entitlement for a quota.

   Answer: True

   The changes made to the quota remainder are indicated directly in the infotype.

Unit 30

833

Time Manager's Workplace

For more information, see the Instructor Guide in SAPNet.

Unit Overview

This unit provides an overview of the functions of the Time Manager's Workplace and how to configure them.

Unit Objectives

After completing this unit, you will be able to:

- Explain the functions of the Time Manager's Workplace
- Customize the TMW to include the tasks and functions of the time administrators in your enterprise

Unit Contents

Lesson: Functions of the Time Manager's Workplace

834

Lesson Duration: 45 Minutes

Lesson Overview

This lesson provides an overview of the functions in the Time Manager's Workplace.

Lesson Objectives

After completing this lesson, you will be able to:

- Explain the functions of the Time Manager's Workplace

For more information, see the Instructor Guide in SAPNet.

Business Example

Time recording is decentralized in your company. Supervisors, foremen, and secretaries in individual departments manage the time data for a group of employees, in addition to their other responsibilities. You want time administrators to use the Time Manager's Workplace to record time data.

Introduction

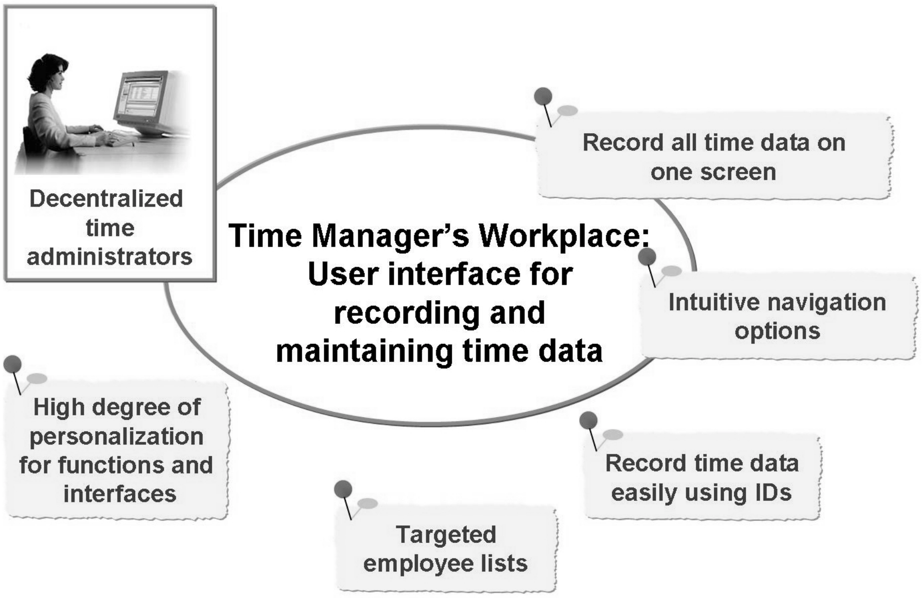


Figure 474: TMW: Introduction

The *Time Manager's Workplace* (TMW) is a user interface that optimizes the recording and maintaining of time data for decentralized time administrators.

The role of a decentralized time administrator is usually fulfilled by supervisors, foremen, administrative assistants or secretaries in their own departments on site. These groups of employees maintain time data for a manageable number of other employees, in addition to their usual tasks.

The *Time Manager's Workplace* user interface was therefore designed to be easy to learn and user-friendly. Some advantages of using the TMW are:

All time data can be entered, corrected, or supplemented on one screen

Intuitive navigation options

Time data is recorded using easily recognizable time data IDs

Time administrators can toggle between different views (multi-day, multi-person, one-day, and team view) to maintain time data.

The Time Manager's Workplace can be personalized, that is, you can customize the TMW to suit each user's tasks, with the applicable functions available.

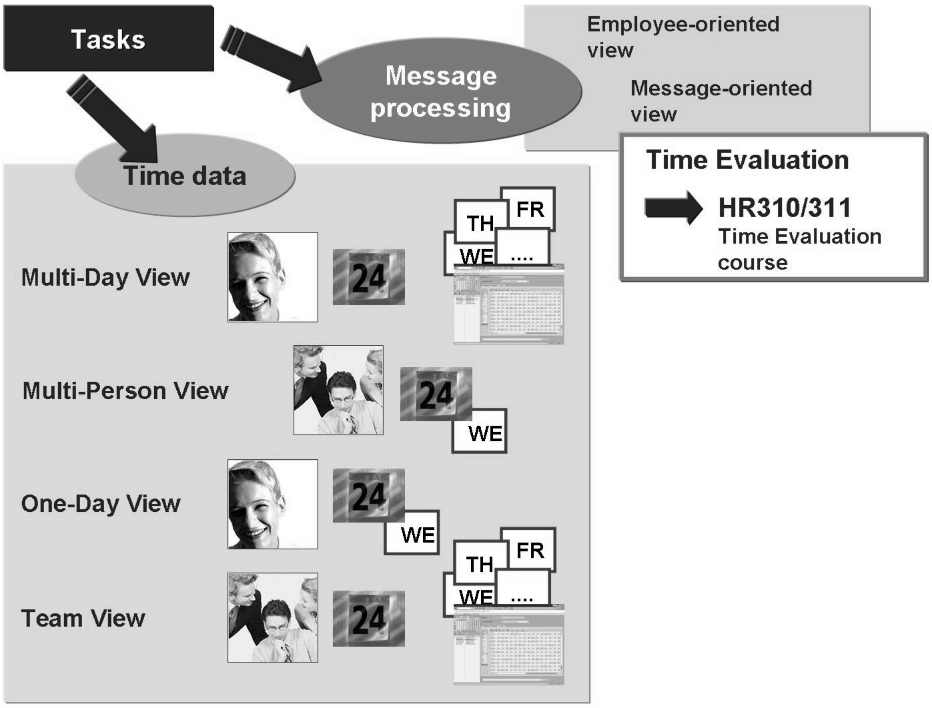


Figure 475: Task Areas and Views

The Time Manager's Workplace provides an integrated user interface to maintain time data and process time evaluation messages. The standard system includes the *Time Data Maintenance* and *Message Processing* tasks.

Using time data maintenance, your decentralized time administrators can enter, correct, or complete time data for the employees asssigned to them. There are various views (such as the multi-day, multi-person, one-day, and team view) available for the time administrators to maintain this time data.

The message processing function in the TMW provides time administrators with a comprehensive tool with which they can assess and process messages issued during time evaluation. Time administrators can toggle between a message-oriented view and an employee-oriented view when processing the messages.

The appropriate screen layout is provided for each of these tasks. These layouts can also be used as templates for your own customized layouts. The actual screen layouts and scope of functions displayed in the TMW can be modified in Customizing according to your company-specific requirements.

In this course, we will only go into detail on the scope of functions available and the Customizing steps for the *Time Data Maintenance* task (not for *Message Processing*). The *Message Processing* task is covered in the courses for Time Evaluation (HR310 and HR311).

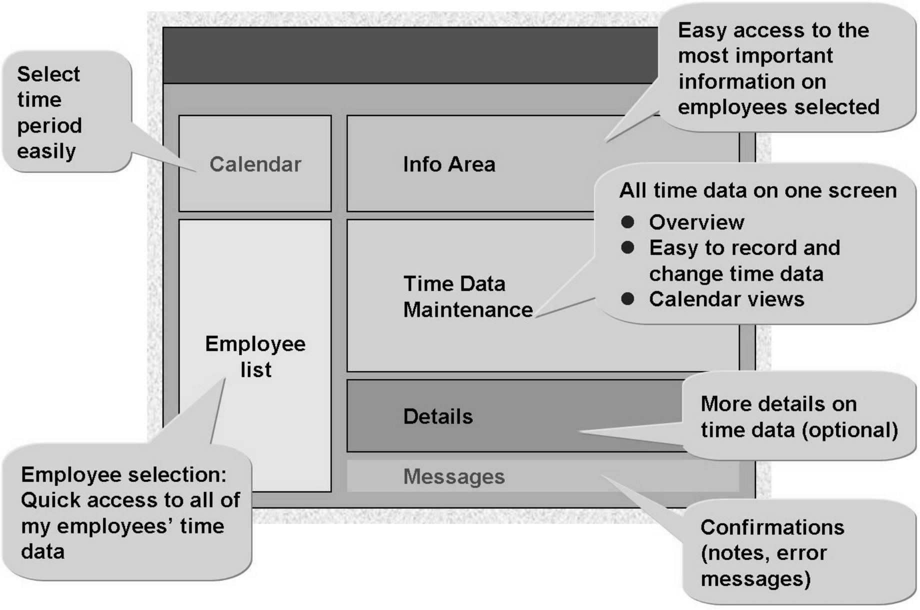


Figure 476: TMW: Layout and Screen Areas

The layout of the screen areas for the *Time Data Maintenance* task in the TMW is displayed in the slide above. The basic structure is similar for the *Message Processing* task, which provides users with consistency.

The *Calendar* is used to select the time period for which time data is to be entered.

The *Employee List* contains the employees assigned to the time administrator. Time administrators can select the employee or employees from this list for whom they want to enter or change time data.

They can display additional information for any selected employee in the *Info Area* (such as details on master data or time accounts).

In the *Time Data* area, time administrators enter and maintain time data using intuitive time data IDs (such as "ILL" for illness or "LV" for leave).

Any additional specification for the time data can be entered in the *Details* area (such as activity allocation specifications for an attendance), if required. A selection of tabs appears on the screen related to the type of time data you enter; you can further specify your time entries on these tabs.

The *Messages* area contains any messages or confirmations concerning time data entered by the time administrators. These messages can be informational, warning, or error messages.

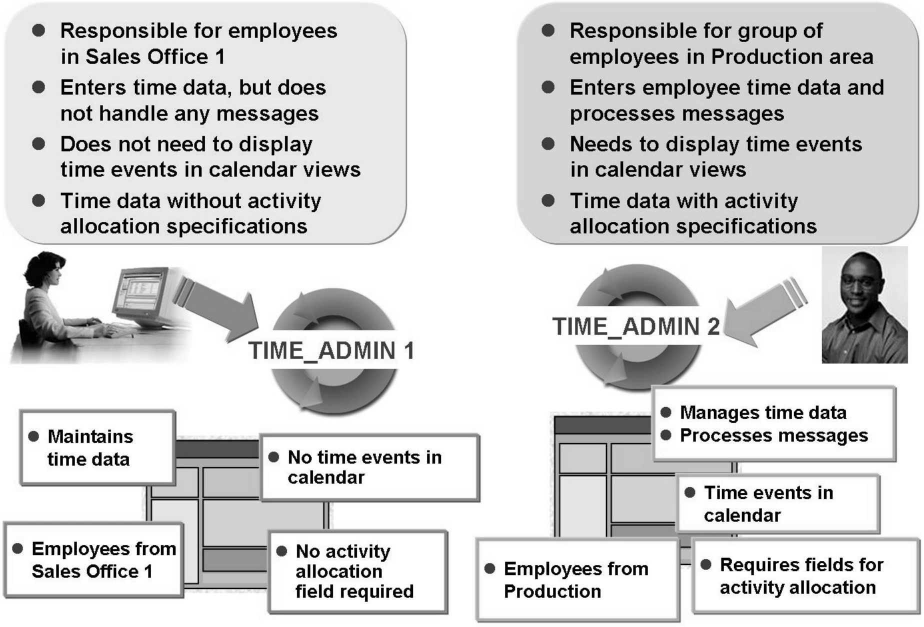


Figure 477: Customizing the TMW for Time Administrators' Tasks

Depending on the type of information and the scope of functions you require in your enterprise, you can modify the TMW to reflect the task-specific needs of your time administrators.

This is possible using profiles. Time administrators call the TMW using a profile that contains specifications for the scope of functions and the screen layout that will appear.

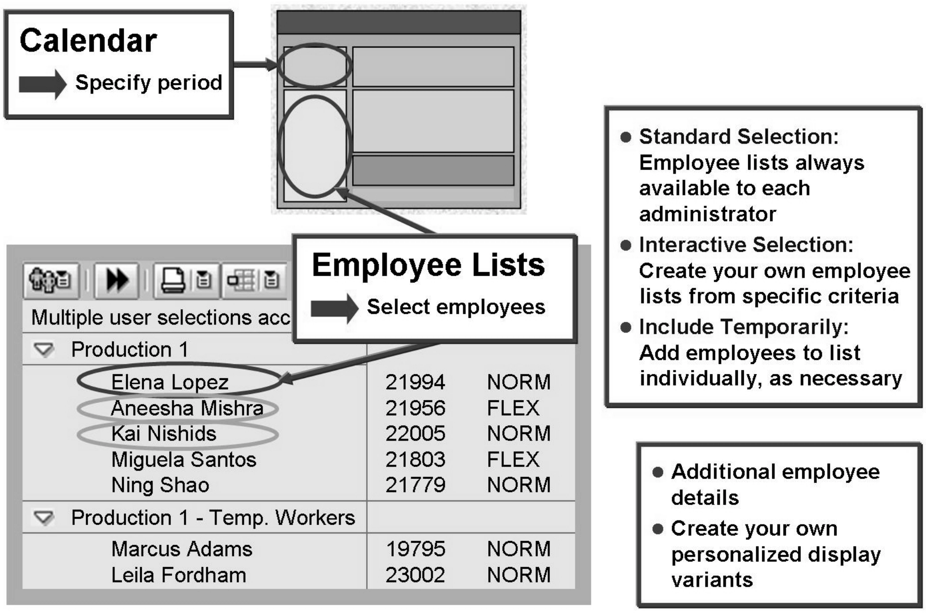


Figure 478: TMW Screen Areas: Calendar and Employee List

The *Calendar* is used in the TMW to select the period for which time data is to be entered. When the TMW is accessed, a period is automatically selected. You can define the length of this default period in the profile settings when customizing the TMW.

The *Employee List* displays the employees assigned to the time administrator in his or her profile. From the employee list, time administrators select the employees for whom they want to maintain or display data.

Depending on their profile settings, time administrators can be assigned several employee lists that they can toggle between.

The profile determines whether or not, and according to which selection criteria, time administrators can create, change, or delete their own lists.

The profile used to access the TMW also determines how the employee list is displayed on the screen.

Additional information on your employees may be available (such as cost center, payroll area, work schedule rule, and so on).

The employee list can be displayed in a tree structure or without a hierarchy.

Time administrators can also temporarily add employees for whom they are not usually responsible to the employee list.

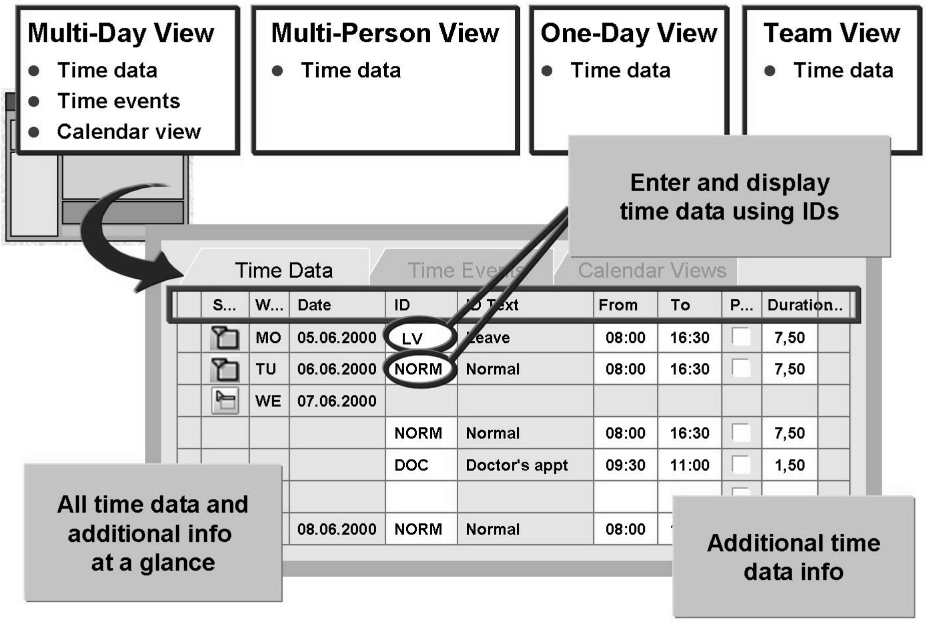


Figure 479: Recording Time Data

The *Time Data* area enables time administrators to maintain all time data for their employees without having to jump to different screens.

The following views are available for the Time Data area:

The *Multi-Day View* allows you to maintain several days of time data for one employee.

The *Multi-Person View* allows you to maintain one day's time data for several employees at one time.

The *One-Day View* allows you to maintain time data for one specific day for one employee.

The *Team View* allows you to maintain time data for several employees for a selected period.

Two tabs are included for the *Multi-Day View* in the standard system:

You can maintain time data stored in the *Time Events* infotype (2001) on the *Time Events* tab.

You can maintain all other types of time data for all of the remaining time management infotypes on the *Time Data* tab. The time data from the *Time Events* infotype (2011) is displayed in pairs on this tab, however, they are only used for display purposes.

The *Time Events* tab is not available in the One-Day View, Multi-Person View, or the Team View.

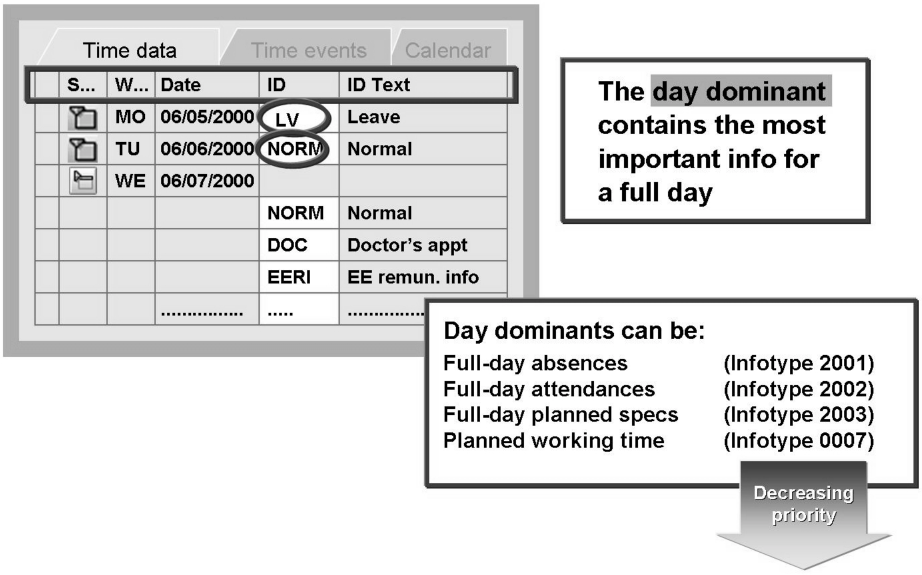


Figure 480: Recording Time Data: Day Dominants

Time data is entered using intuitive time data IDs. This significantly reduces the administrative workload of time administrators. For example, you could enter "ILL" to create an illness record. The actual time data IDs that can be used for specific or general time data are defined in the Customizing steps for Personnel Time Management based on the business requirements of your enterprise.

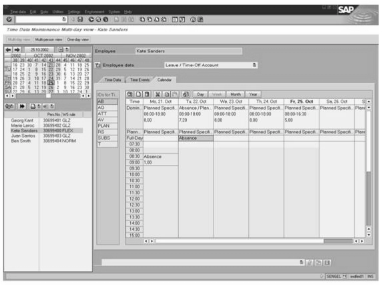
Additional fields enable you to store additional information about the time data entered. The fields that are displayed are defined in the profile used.

The time data entered using time data IDs is actually stored in the following infotypes: Absences (2001), Attendances (2002), Substitutions (2003), Availability (2004), Attendance Quotas (2007), Employee Remuneration Info (2010), Time Events (2011), and Time Transfer Specifications (2012).

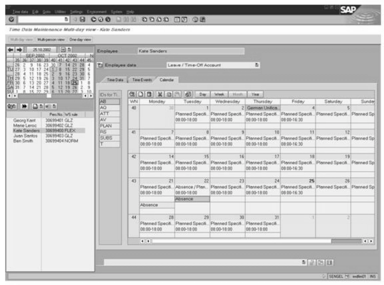
In the Time Data area of the TMW, day dominants are used to represent the most important information that applies to each day. The focus is on the employee's availability. Day dominants always represent information that applies to an entire day. They are available for use in the One-Day, Multi-Day, Multi-Person, and Team Views.

If you collapse the time data for a specific day, only the dominant information for that day is displayed. If you expand the day's data, all of the time data for the day in question is displayed. An additional blank line appears on the screen, in which you can enter more time data. In the team view, you can enter data only in the time data ID line of the dominant.

TMW weekly calendar



TMW monthly calendar



- **Three new calendar views have been added to the Time Data area of the Multi-Person View**

TMW annual calendar

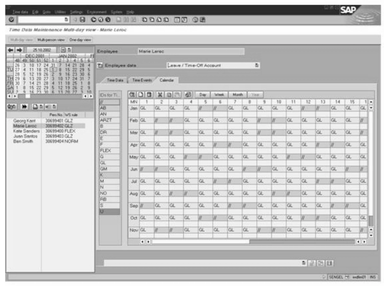


Figure 481: TMW calendar views

The calendar view is new in the time data maintenance area of the TMW. It provides a graphical overview of a person's time data (time entries and time events). A daily, weekly, monthly, and annual calendar are available, which enables you to gain a quick overview of a specific period.

The use of colors for the time data IDs enables you to quickly differentiate different types of time data.

You can also maintain data in this view. The color-coded time data IDs are displayed in a bar to the left of the calendar. You can drag and drop them to the required days. If required, you can copy and paste the calendar entries, such as recurring attendances or absences.

Because they work in a similar way to well-known PC applications (such as Microsoft Outlook), the calendars are very easy to handle.

The new calendar views are part of the standard delivery for R/3 Enterprise. They can also be implemented in Release 4.6C on a project basis. (See SAP Note 421014)

If you are interested, you can create a SAP OSS message under the PT-RC-UI-TMW component.

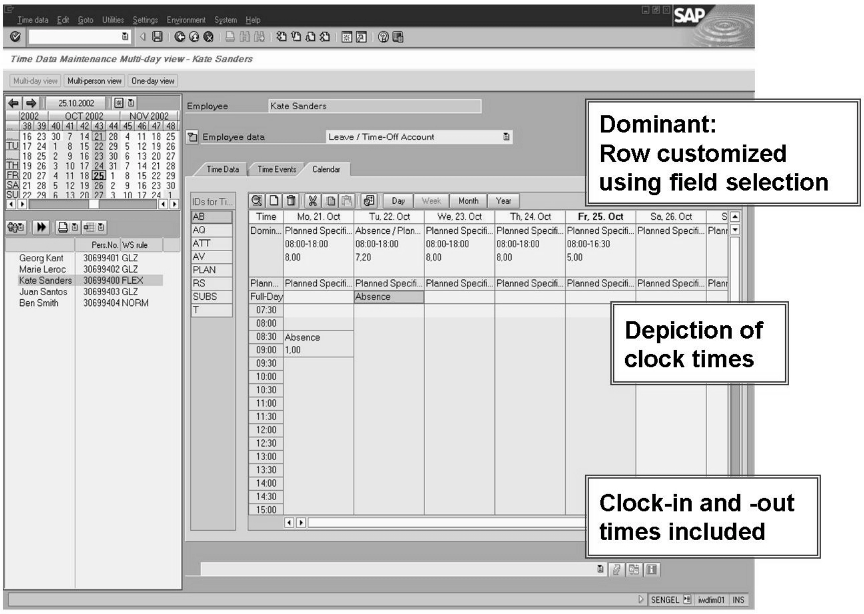


Figure 482: TMW Calendar Views: Weekly Calendar

The weekly calendar represents a seven-day week. Users select the week they want to display or maintain in the calendar in the upper left screen area.

The weekly calendar displays the date in the top row. The row also displays public holidays, taken from the holiday calendar assigned to the employee. The day dominant is displayed in the row below. It is defined as it is represented on the Time Data tab page. Then, the full-day records of the *Attendances* or *Absences* infotype are displayed. (If there are none, the planned working time is displayed.) The time data with clock times is displayed below that. They are displayed alongside the appropriate time in the calendar. The recorded clock time and the duration can also be displayed.

In this view, it is possible to display time data and time events at the same time.

To maintain time data, administrators can simply drag and drop the color-coded time data IDs from the list to the left of the calendar. To enter records of more than one day, you double-click on the detail area. You can also drag and drop time entries to change their position. If you want to maintain a time entry more than once, you can use the copy and paste function. You can also use the *Delete* button to remove incorrect time entries.

You can customize the appearance of the calendar views to suit your requirements.

In addition, each user can maintain his or her own personal settings. For example, users can define their own color scheme for each of the four views. The *Settings* button is to the left of the *Day* button.

The TMW calendar views also include the daily calendar. It contains the same functions as the weekly calendar, but focuses on one day to aid readability.

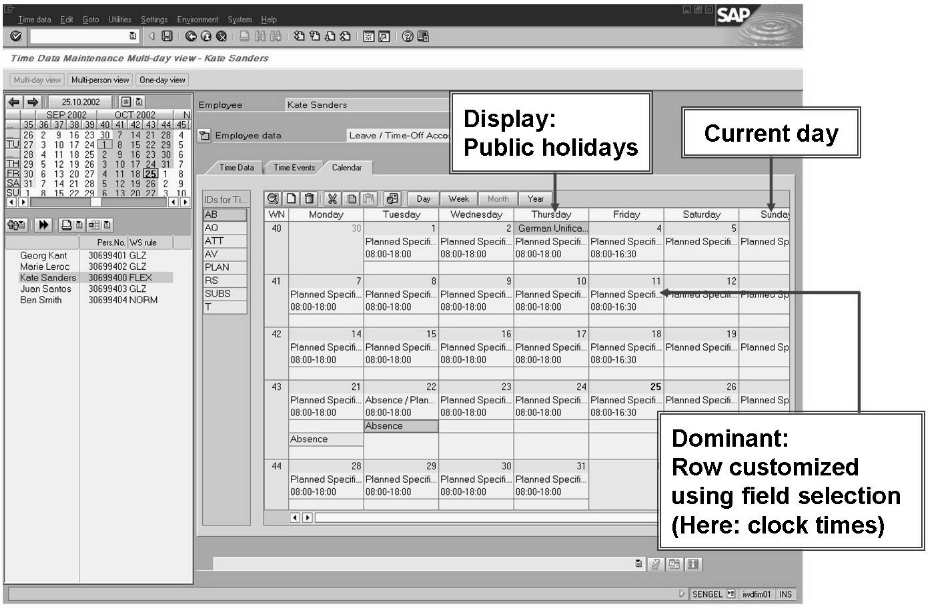


Figure 483: TMW Calendar Views: Monthly Calendar

The monthly calendar provides an overview of an entire working month. As for the weekly calendar, you can select the period in the calendar to the upper left.

The calendar displays the weekdays horizontally and the calendar weeks vertically. The date is displayed in the box for the day. The current day is highlighted in bold. Public holidays are displayed here in place of the current date.

To prevent the display from becoming too cluttered, you can customize it so that the partial-day records are displayed collapsed. To view further information for the day, you can select it by clicking on it and then switch to the weekly view or the day view.

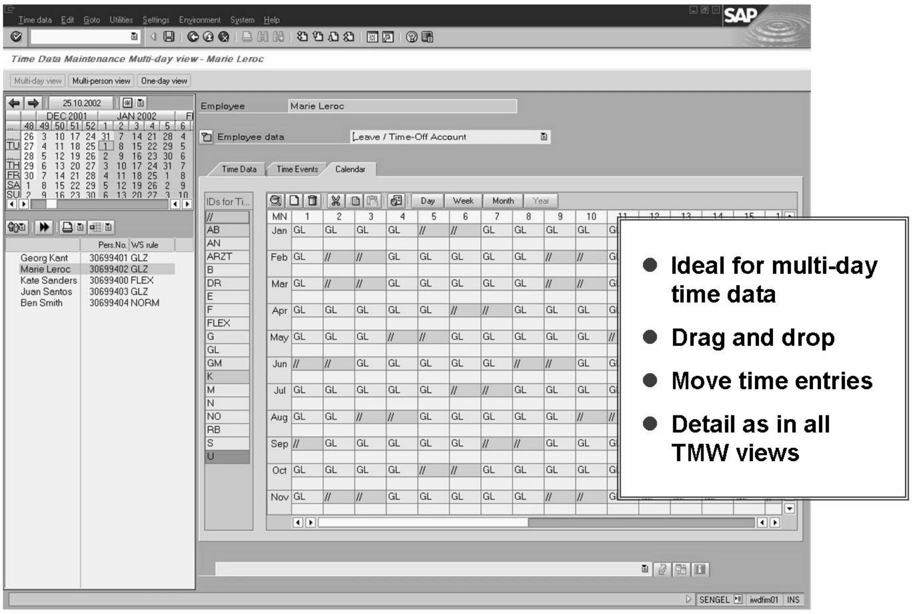


Figure 484: TMW Calendar Views: Annual Calendar

The annual calendar provides the broadest overview of your employee's working times. You can view time data for an entire year at a glance.

You can check the shift pattern of the assigned work schedule and the vacation planning, and also maintain data such as a change in leave or an illness over a longer period of time, for example. You can use the drag and drop and copy and paste functions in this view too. You can double-click to view details for time data.

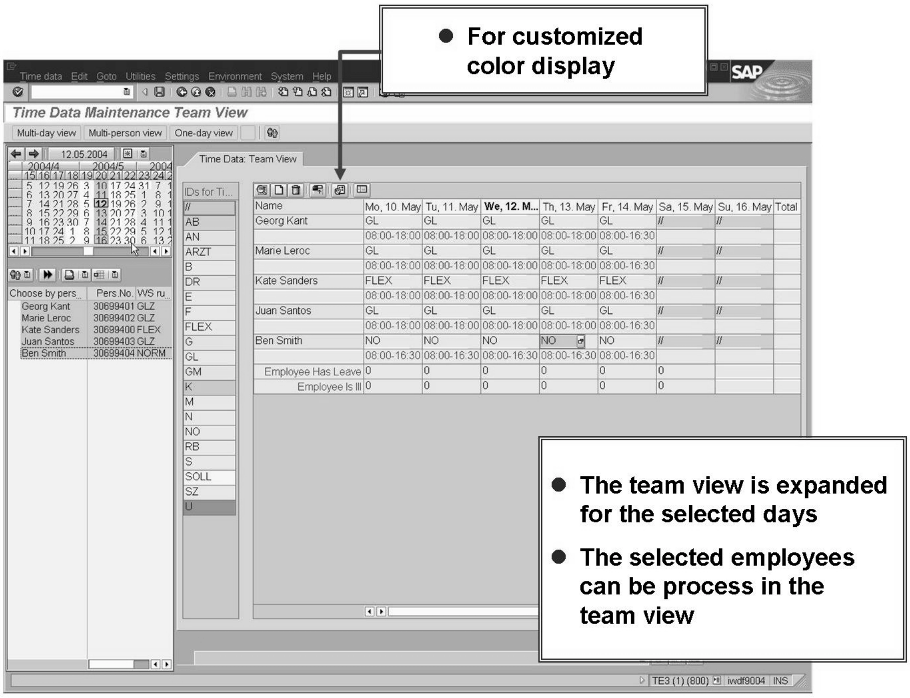


Figure 485: TMW Team View

The team view is a list-oriented color display of a group of employees' time data over a period of your choice. It provides an overview of the position and frequency of full-day and partial-day data for your entire team. The team view is ideal for entering time data when you want a quick overview of full-day time data for your entire team.

If partial-day information is available for employees, you can display it by double-clicking the tick icon beside the dominant. This then takes you to the on-day view for the employee, where you can select the entry and branch to the detail view. To return to the team view, you simply double-click the *Team View* option.

You select in the calendar the period you want to edit. You can select the employees from the employee lists. You can also add employees to the team temporarily.

If you want to plan shifts and vacation for your team, the different colors of the time data IDs enable you to recognize at a glance the position and frequency of the different shifts, and detect any bottlenecks.

The team view provides a quick overview of full-day and multiple-day time data for your entire team. To simplify the planning process, you can use a customer-specific Business Add-In (BAdI) to define additional rows and columns for the information you require, such as the number of employees off sick or a shift counter displaying the number of early, late, or night shifts, for example.

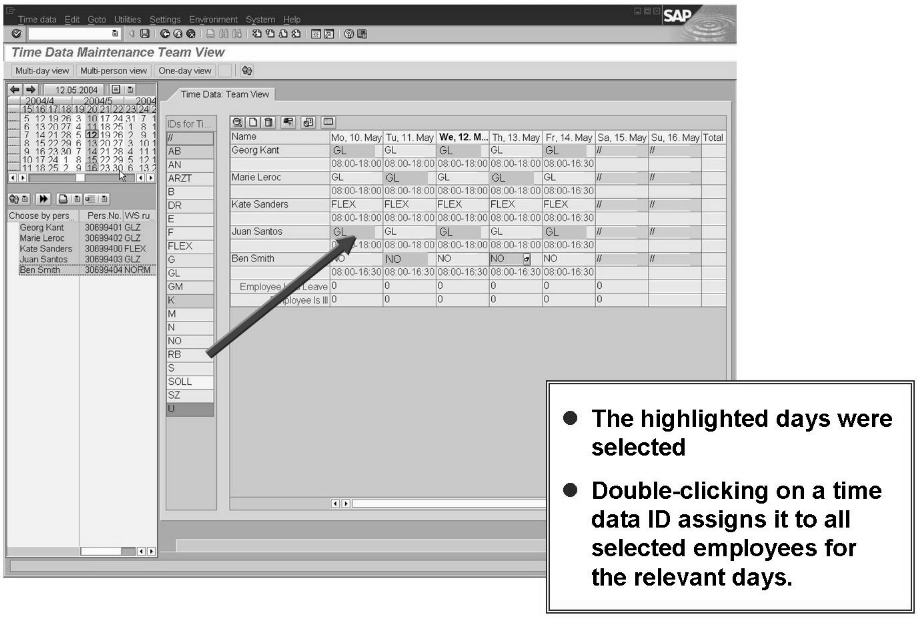


Figure 486: TMW Team View: Maintaining Time Data

The list-oriented team view contains many familiar functions from PC applications, which enable you to process time data quickly and easily. You can enter time data for individual employees or an entire team.

You can customize particular colors for the time data IDs that are permitted in a profile for the Time Manager's Workplace. You can also have IDs representing similar business situations displayed in the same color or a similar color so that time administrators can analyze an employee’s time data at a glance.

In addition to the color aid, the ID itself is also displayed in the field to indicate the exact nature of a time entry. The color IDs are listed in a key in a column next to the calendar view.

In the team view, you can enter data only in the time data ID line of the dominant. You can enter whole-day time data in the following ways:

- You can drag and drop time data IDs from the column to a field of the calendar. To do so, select the ID in the list, click on it again and, while holding down the mouse button, drag it to the required position in the team view. Alternatively, you can select the required field(s) in the team view and double-click a time data ID, or you can simply enter the required time data by overwriting the existing time data ID.
- As in the other list-oriented views, you can use all functions for copying, creating, and deleting time data and so on.

Caution: Cutting and pasting in the team view is possible only for the dominant.

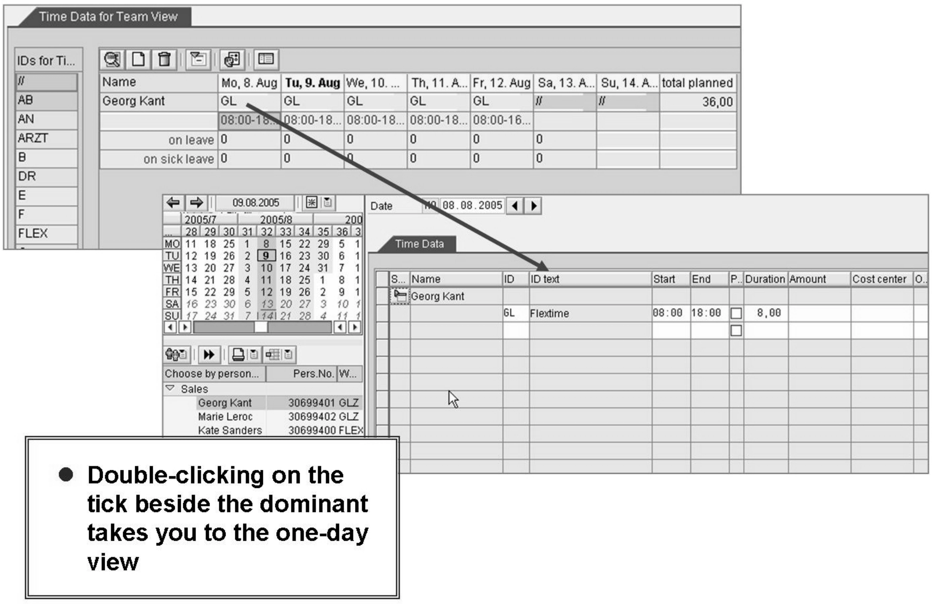


Figure 487: Processing Partial-Day Entries in the Team View

o enter partial-day information, double-click on the dominant (the field to the right of the time data ID) of the required day. The one-day view is automatically expanded. In it, you enter information such as a doctor's appointment to specify the time entry. You can branch from the one-day view to the detail view to enter additional data.

If partial-day time data exists for a day, a tick icon is displayed in the field beside the dominant. You can click on the tick to branch to the one-day view displaying the partial-day time data, where you can edit the data. To return to the team view, double-click on *Team View* in the menu.

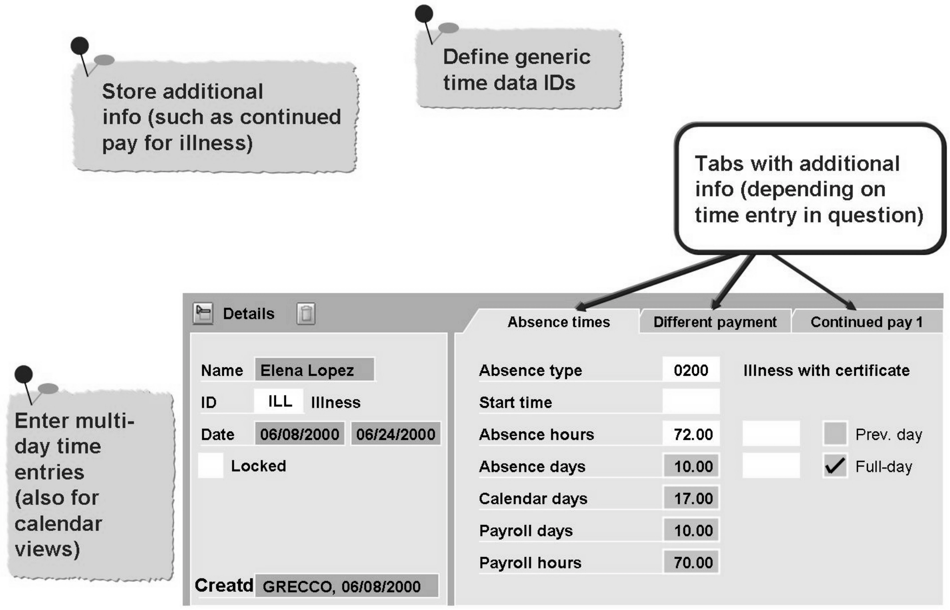


Figure 488: Details

The *Details* screen area can be used for the following functions:

If the columns displayed in the *Time Data* screen area are not sufficient, you can display the *Details* area to further specify the time data.

You can define the specific type of time data where a generic time data ID has been used (see below).

The *Details* screen area can be used to enter multi-day time entries.

If the *Details* area is displayed for an existing time entry, the appropriate screen will appear that is used for that type of time data. In other words, the appropriate tab cards and fields will appear.

Generic time data IDs:

You should only define these types of time data IDs for data that is regularly used by time administrators. Time administrators can also use these generic time data IDs for other types of time data and then use the Details area to further specify the data.

Example: There are two different time data IDs used for the most common types of attendances in your enterprise. A generic time data ID is used for all other attendances. When one of these more seldom used attendance types must be used, time administrators simply enter a generic time data ID and then further specify the type of attendance in the Details area.

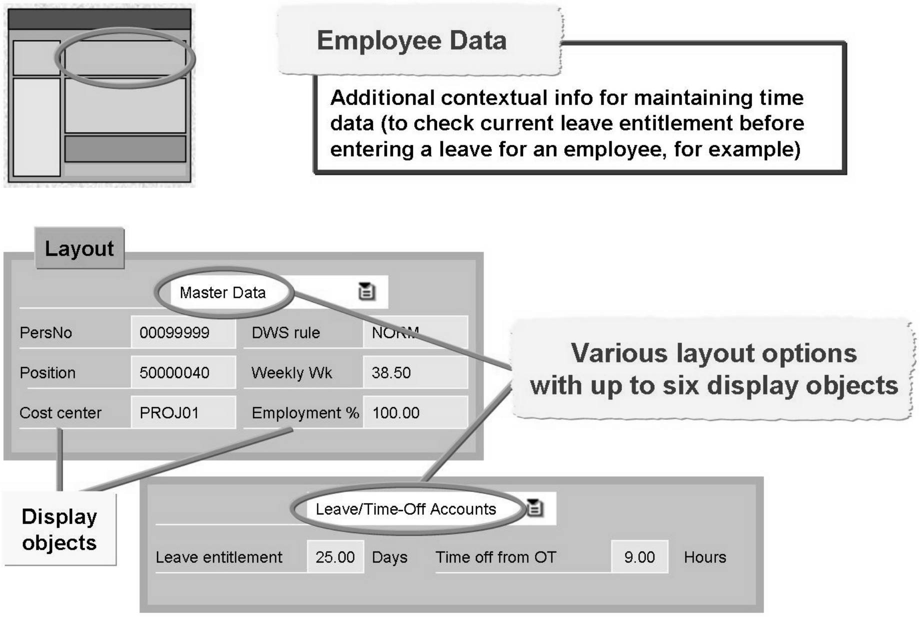


Figure 489: Employee Data Screen Area

The *Employee Data* screen area displays additional contextual information about the selected employee, which time administrators can use to assist them when entering data (HR master data or time account balances, for example).

It is useful for time administrators to be able to view their employees' time account balances when recording leave or time off from overtime, so that they know whether enough quota remains to record this data.

Display objects (that is, individual information) that are displayed together can be grouped in a layout (called an InfoGroup).

Facilitated Discussion

Discussion Questions

Use the following questions to engage the participants in the discussion. Feel free to use your own additional questions.

Lesson Summary

You should now be able to:

- Explain the functions of the Time Manager's Workplace

Lesson: Customizing the Time Manager's Workplace

851

Lesson Duration: 80 Minutes

Lesson Overview

In this lesson, you learn how to customize the Time Manager's Workplace.

Lesson Objectives

After completing this lesson, you will be able to:

- Customize the TMW to include the tasks and functions of the time administrators in your enterprise

For more information, see the Instructor Guide in SAPNet.

Business Example

Your job is to configure the TMW so that time administrators have access to the specific functions they need to complete their time recording tasks.

Overview

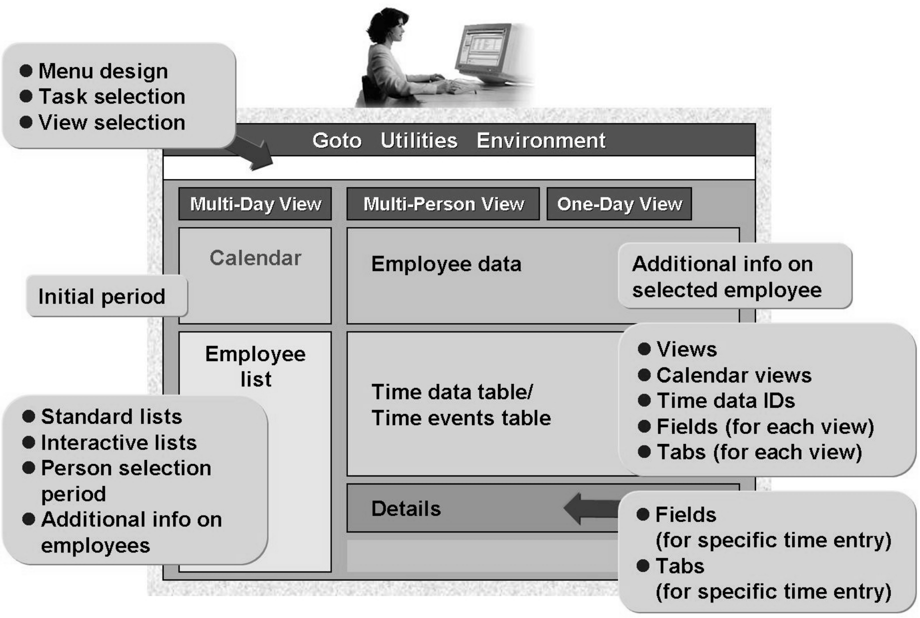


Figure 490: Customizing the Time Manager's Workplace

The screen layout and scope of functions in the TMW can be flexibly and individually modified to suit the specific tasks of your time administrators.

Help in implementing the TMW

Consulting note for the TMW: 447097

- Is continuously updated
- Contains further notes that may be relevant for implementation
- Is updated for SAP R/3 Enterprise release

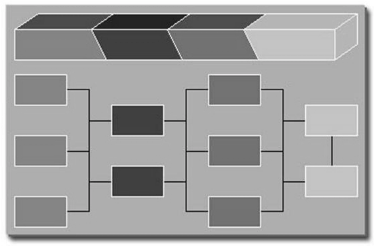


Figure 491: Consulting Note for Implementation

To provide you with the most up-to-date information, SAP development continuously updates the consulting note 447097: “Questions and answers on the TMW implementation.”

This note also contains information for the SAP R/3 Enterprise release (SAP_HR 470) in the relevant HR Extension release (such as EA-HR 110).

You can also display the note on the Internet. You will find a link to SAP Notes under http://service.sap.com. You can request a user for the service portal free of charge.

The following notes are related:

0000407303 Employee dialog box in the Time Manager's Workplace

0000421014 TMW calendar views - availability on 4.6C

0000415425 Transport of Customizing Settings

0000415119 Required entry fields in detail area of TMW

0000367249 Customer enhancements for the BLP

0000455468 TMW: Message line in the upper screen area

0000598986 TMW: Team View

(The notes are available in English and German.)

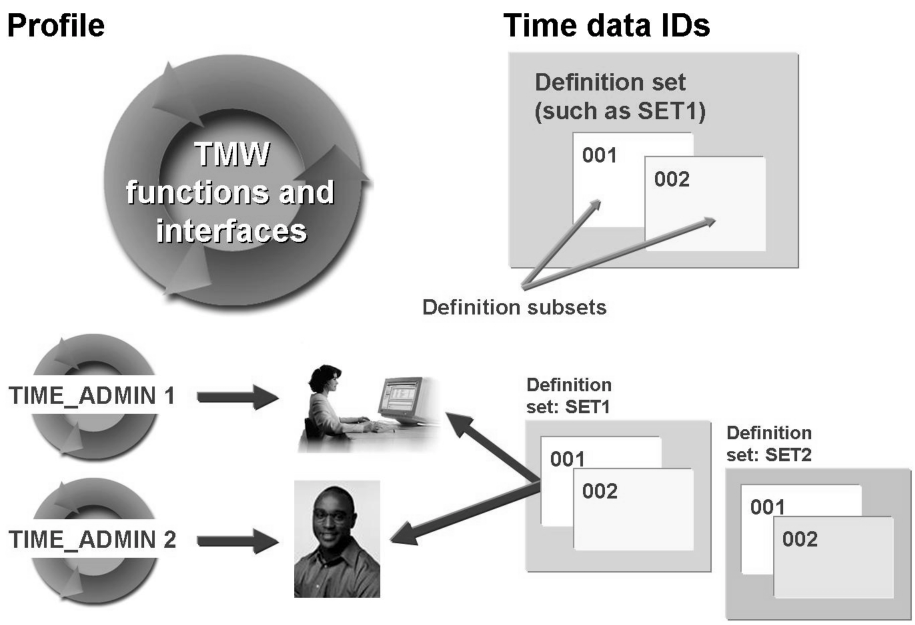


Figure 492: TMW: Profiles and Time Data IDs

Profile methodology allows you to modify the appearance and certain functions of the *Time Manager's Workplace*. Users always access the TMW using a profile, which defines the folowing:

The initial date that appears when the TMW is accessed

The employee lists available to the time administrator

The fields, columns, layouts, views, and functions in the individual screen areas of the TMW

Whether users can switch between various time data ID subsets

Time data IDs can be individually defined for the types of time data in the TMW. If you want to use different time data IDs in different enterprise areas, then you can create several definition sets, which can, in turn, be subdivided into different subsets.

A profile and a combination of definition set/subset must be assigned to each time administrator.

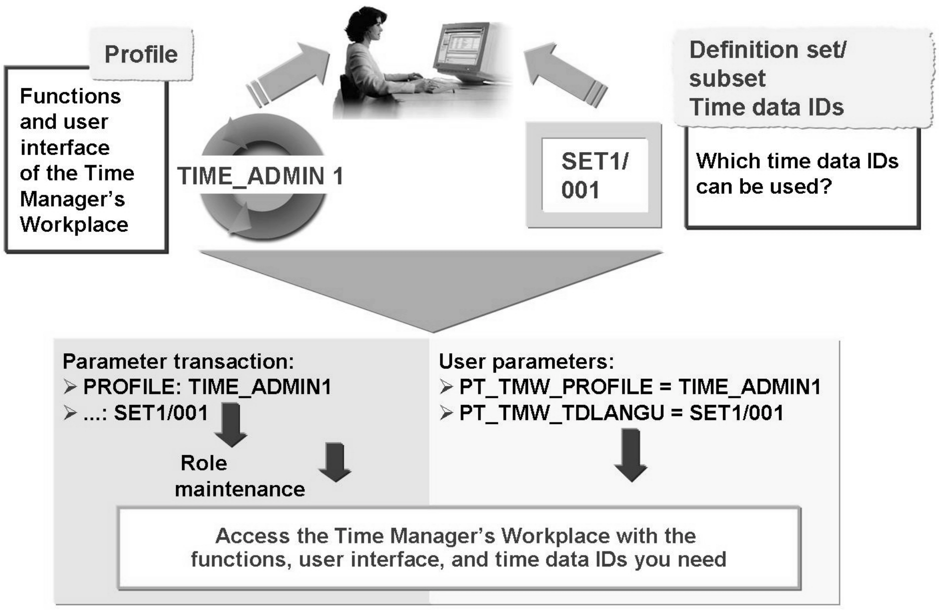


Figure 493: Customizing the TMW for Time Administrators' Tasks

The following options are available to ensure that your time administrators always see the right screen with their required functions and time data IDs automatically when they access the TMW:

Parameter transactions are created in which a profile and a combination of a definition set and subset for time data IDs are stored. These parameter transactions can also be used in role maintenance. If a role is assigned to the time administrator, the profile that is used to access the TMW and which time data IDs the time administrator can use depend on the parameter transactions assigned to that role.

You can use the user parameter **PT_TMW_PROFILE** to specify for each user the profile used to access the TMW; the user parameter **PT_TMW_TDLANGU** determines the combination of definition set/subset the user can use.

If values for the profile and the definition set/subset are not specified either in the assigned role or in the user parameters for the user, then the system queries this information when the user accesses the TMW. The user must then enter the appropriate values. The system stores these values in the user parameters and uses them from then on each time the TMW is accessed by that user.

1. Create time data IDs
   - ➔ Infotype with subtype for frequently used shortcuts
   - ➔ Create generic time data IDs to enable other data to be entered
2. Create suitable profiles:
   - ➔ Copy the standard profiles and modify them to suit your requirements
3. Create employee selections:
   - ➔ Use the interactive employee list to create your selections
   - ➔ Assign the selections to your profiles
4. Adjust screen areas as required:
   - ➔ If required, you can modify the layout of the screen areas in the IMG activity of the same name

Figure 494: Customizing Recommendations

When a time administrator calls the TMW for the first time, the system automatically queries which profile and which combination of definition set/subset for time data IDs are to be used by the application. These specifications are mandatory. Therefore, you must create the profiles and time data IDs that you require in your enterprise. Determine which tasks your time administrators have to carry out.

It is recommended that you copy the profiles and, if required, time data IDs provided in the standard system.

You should enter generic time data IDs for each infotype or personal work schedule for the types of time data for which you do not want to create your own time data IDs.

If you want time administrators to have the employees for whom they are responsible displayed automatically in the TMW, you have to create suitable employee selections. You store these employee selections in each profile.

If necessary, you can modify individual screen areas of the TMW to match the requirements of your time administrators. If you do not store your own field selections in the profiles for each screen area, then the field selections displayed are those contained in the standard system.

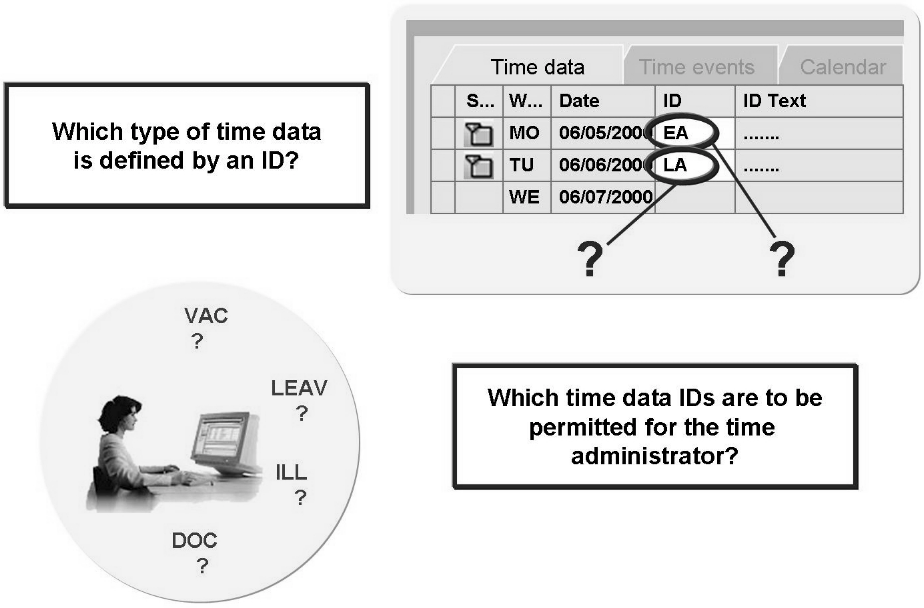


Figure 495: Customizing Time Data IDs (1)

Time administrators require time data IDs to record time data.

You can define the exact type of time data that the time data ID stands for.

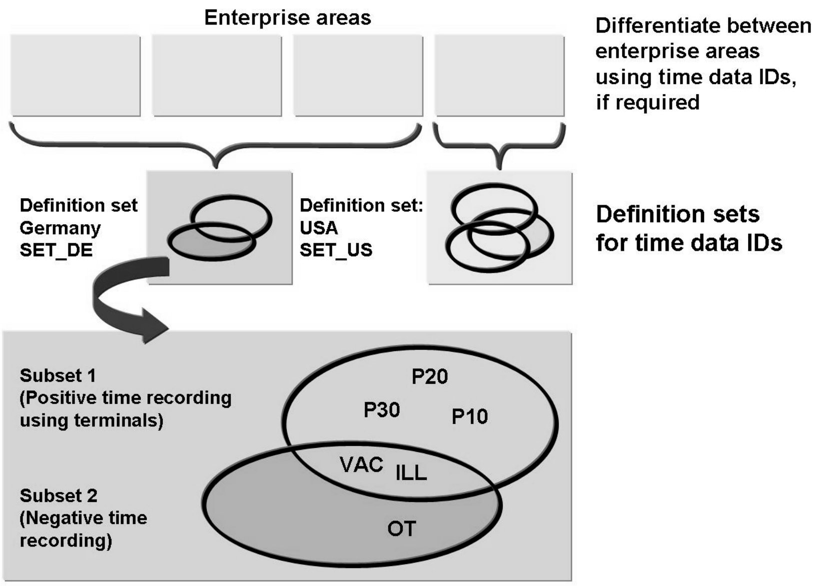


Figure 496: Customizing Time Data IDs (2)

Time data IDs do not need to be defined the same across your enterprise. If enterprise areas want to use different time data IDs, you can create definition sets for the individual areas. Then time data IDs can be defined for these definition sets. Definition sets allow the time data IDs to be used independently in different areas of your enterprise.

Example:

An international company uses the time data ID "VAC" for vacation, "OT" for overtime, "AV" for availability, and so on. The German subsidiary, however, uses the time data IDs "U" for vacation, "M" for overtime, and "B" for availability. In this case, two definition sets are created.

Within a definition set, you can also define different subsets for time data IDs to differentiate between the time data IDs within one enterprise.

Definition set SET_US

Time data IDs are created according to definition sets

Time data IDs

ID	Text	Data Category	Data Type	Attributes
ATT	At work from time posting	TIMPAIR	PT	Attendance/absence status in pair building
LV	Leave	Infotype	2001	Attendance/absence hours subtype 0100 (Annual leave)
LV	Leave	Infotype	2001	Attendance/absence hours subtype 0190 (Educational leave)
E	Early shift	Infotype	2003	Daily work schedule E-11
BO	Bonus	Infotype	2010	Wage type MQ10

Figure 497: Customizing Time Data IDs (3)

Each time data ID must be assigned to one of the following data categories: infotype (IT), time pair (TIMPAIR), or work schedule rule (PWS).

In addition to the data category, a data type must be entered, and additional information that uniquely identifies the type of time data.

The following are examples of data types that are available for the data category **Infotype (IT)**:

Absences (2001), Attendances (2002), Substitutions (2003), Availability (2004), Attendance Quotas (2007), Employee Remuneration Info (2010), Time Events (2011), and *Time Transfer Specifications (2012)*.

The data category **Time Pair (TIMPAIR)** can only be used in combination with the data type *Time Pair*.

The data category **Work Schedule Data (PWS)** can only be used in combination with the data type *Inactive*. The system uses this type of time data ID to display employees who are not active employees, that is, they have left the company during this selection period.

You can create generic time data IDs. The data type attributes are not required for these types of time data IDs. Generic time data IDs are used for time data that is infrequently entered or processed by time administrators.

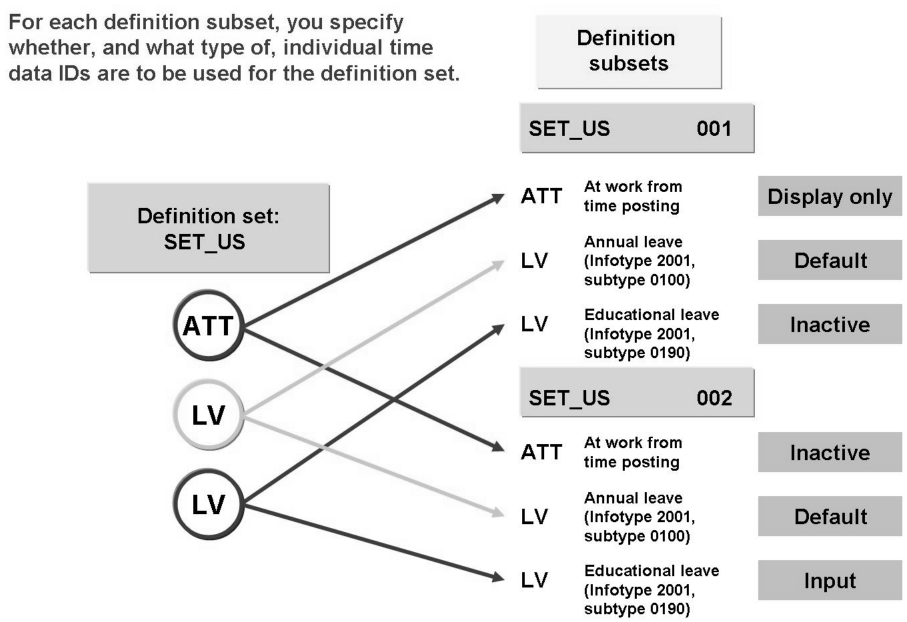


Figure 498: Customizing Time Data IDs (4)

By creating subsets, you can further differentiate how the time data IDs are used within one definition set.

Time data IDs are created for each definition set. Definition subsets specify the following:

Which time data IDs can be entered (specific ID has priority or can be changed).

Which time data IDs are used for display purposes only ("display only")

Which time data IDs are not to be used for this subset ("Inactive")

If employees are to enter time data IDs, you must define them as the default or an input ID:

You must specify any time data ID that reflects only one characteristic as the "default."

If several characteristics exist for one time data ID (such might be the case for "LV" for annual leave (infotype 2001, subtype 0100) and Educational Leave (infotype 2001, subtype 0190), then you must indicate that one of these characteristics is to be the default (for each combination of groupings for personnel subarea and employee subgroup).

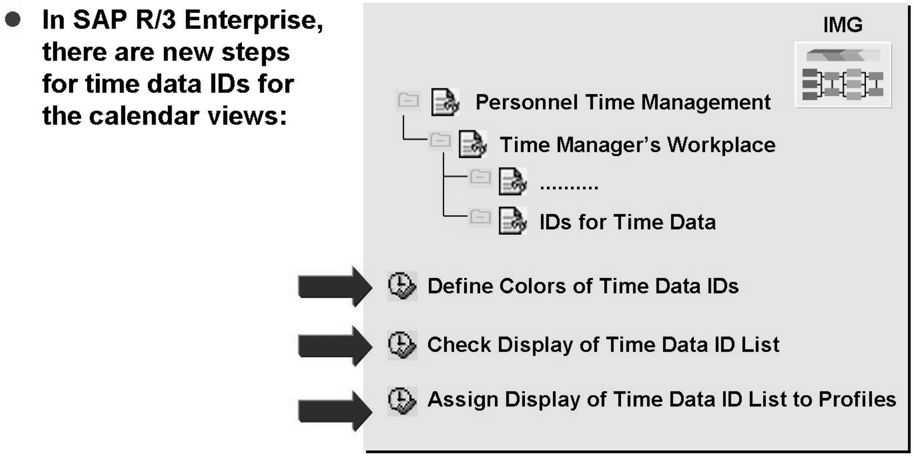


Figure 499: Customizing Time Data IDs for Calendar and Team Views

In R/3 Enterprise, there are new steps for time data IDs for the calendar views and team view.

The color-coded time data IDs are displayed in a bar to the left of the calendar. You can drag and drop them to the required days. If required, you can copy and paste the calendar entries, such as recurring attendances or absences.

There are new Customizing activities to enable you to define the colors and the appearance of the time data ID list.

In the first new activity, you create the color design for the calendar views and the team view. You can define different colors for the different time data IDs. This gives users a better overview of the relevance or frequency of time data, for example.

In the second activity, you define the layout of the time data ID list to the left of the calendar. Users can drag and drop time data IDs from the list to the calendar. The settings apply to all calendar views and time data IDs and for the team view. You can choose between the following options:

You can have the time data IDs themselves displayed for experienced users (the HIDE field selection)

You can have the texts of the time data IDs displayed for less experienced users (the TEXT field selection)

You can hide the list entirely so that users can only use the detail screen to enter new time data (the TDTYPE field selection)

In the third new activity, you assign the layout of the time data ID list to the profiles.

You therefore use the profile used to access the Time Manager's Workplace to control the layout available to the time administrator for the time data ID list.

The time data ID list is part of the TDT screen area.

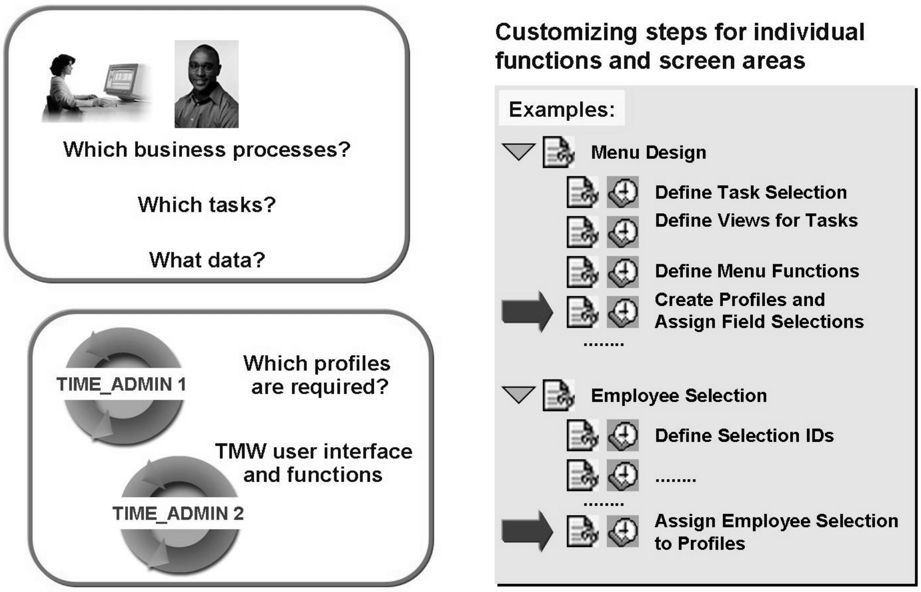


Figure 500: Profiles

SAP delivers three sample profiles in the standard system: SAP_XX_TIME_ADMIN (Time Data Maintenance), SAP_XX_TIME_AD_GRP (Time Data Maintenance for Groups) and SAP_XX_WORKLIST (Message Processing). You can use these profiles to maintain time data, or copy them and modify them to make your own company-specific profiles.

You can also maintain profiles in the Implementation Guide as soon as you have completed a logical unit in Customizing and you want to transfer the selections and definitions to the profiles.

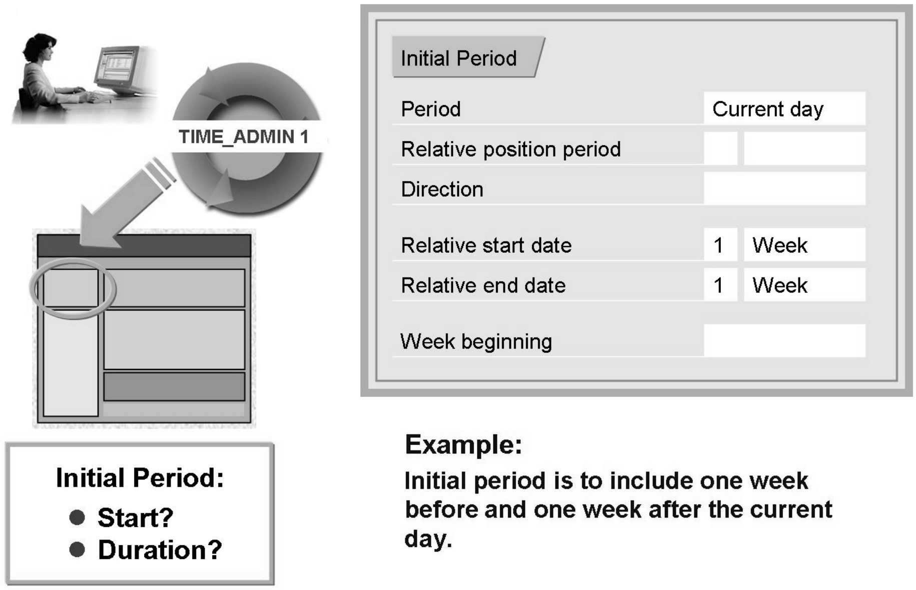


Figure 501: Customizing: Initial Period

The initial period to be used every time the TMW is accessed is stored in profiles.

In the first step, you determine the initial date as the current day, week, or month. If the week is selected as the initial period, then you can specify which you want to be the first day of the week.

You can then move the position of the initial period forward or back by a specified duration (which you can enter in days, weeks, or months).

You can also change the duration of the initial period. You can extend the initial period by entering a duration that has a start date in the past, or an end date in the future.

Note:

If you want to extend the initial period by weeks or months, note the following: If, for example, you enter a week, then the system increases the initial period up to the first day of the week or the weekend. If the initial date is the first day of the week or weekend, then the system extends the initial period another week into the past or future. In other words, the initial period can be extended by up to one week in each direction. The same applies if you enter one month.

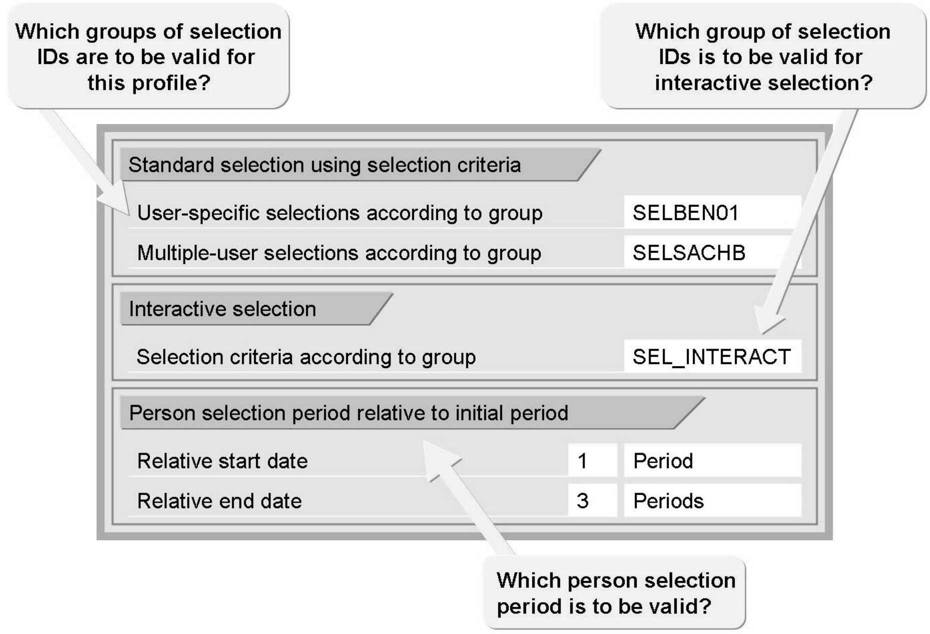


Figure 502: Profile Settings for Employee Selection

In the profile, you specify which employee selections are valid when the TMW is accessed using this profile.

In a **standard selection**, you can specify for employee selection either a user-dependent group or a group available for all users.

If you want your time administrators to be able to create their own employee selections, then you must set up a corresponding group for **interactive selection**.

The entries for the **person selection period** are required for two reasons:

Whether or not, and up to what point of time in the past, the system will display employees who are no longer assigned to the time administrator or who have left the company

Whether or not, and up to what point in time in the future, the system displays employees who are to be hired at a future date or will be assigned to that time administrator in the future

The person selection period is calculated on the basis of the respective initial period. If you do not specify the **Person selection period relative to initial period**, the system selects the employee list for the period that you defined as the initial period. The entries for the **person selection period relative to initial period** cause the person selection period to be extended from the start date of the initial period backwards into the past, or from the end date of the initial period to a future date.

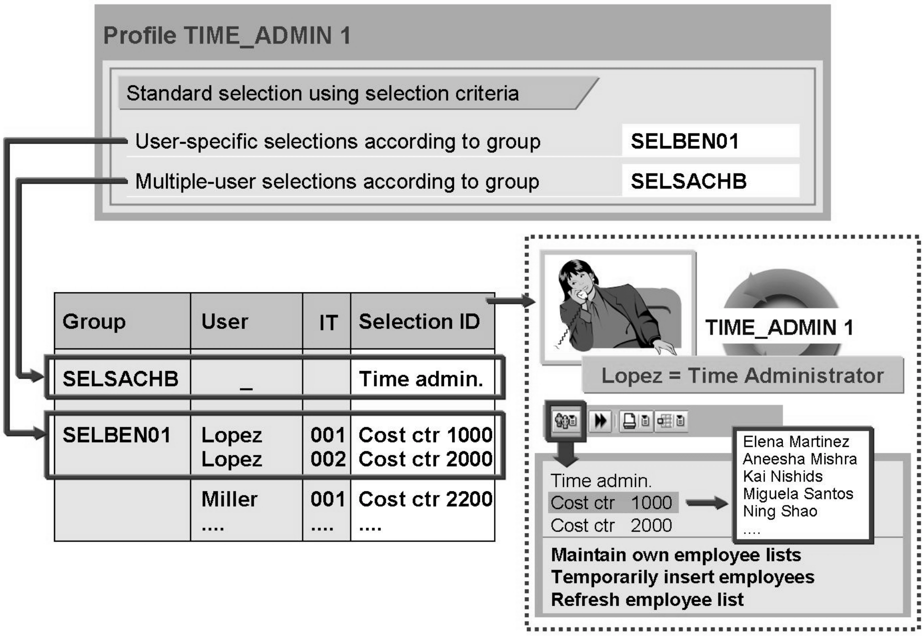


Figure 503: Customizing: Employee Lists - Standard Selection (1)

The standard selection is used to determine the employee selections available to time administrators in the Employee List screen area. The individual employee selections are defined using **selection IDs**.

In the standard selection, several employee lists (selection IDs) can be available to the time administrators. You do this by grouping the selection IDs.

In one of these groups, you can indicate that an individual selection ID is user-specific or available to all users. User-specific selection IDs are only valid for the user entered; user-independent selection IDs are valid for all users.

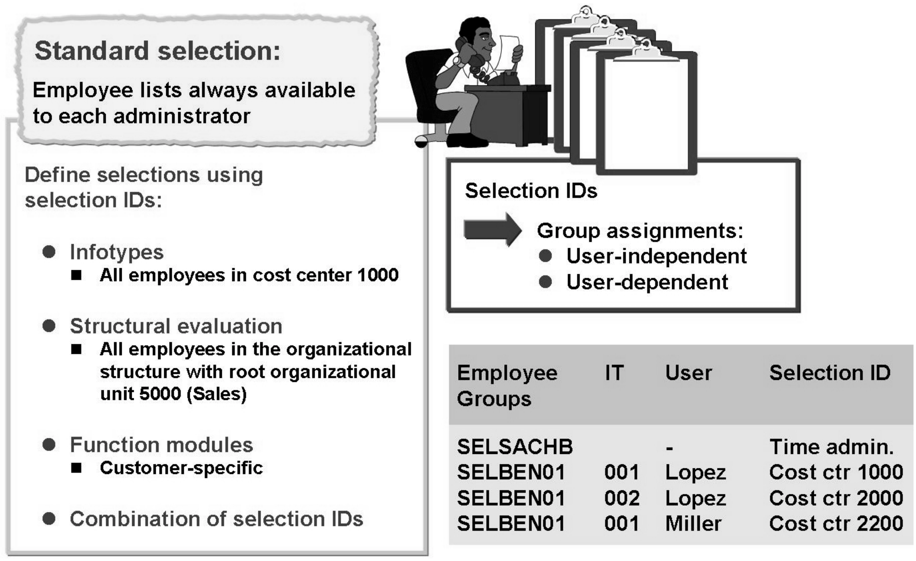


Figure 504: Customizing: Employee Lists - Standard Selection (2)

Selection IDs are also used in various areas of SAP HR to simplify the grouping together of objects for selection purposes. Selection IDs can be defined based on infotype tables, structure reports, or special function modules. These three types of selection IDs can be combined any way you require.

To define a **selection ID based on a table**, you can use the following types of fields: infotype fields, additional fields, text fields, or fields specific to SAP Query (additional fields, additional table fields, and alias table fields). You can also define ranges that restrict the amount of objects to be processed for selection IDs based on tables.

Selection IDs based on a structure correspond to a structural evaluation, that is, a start object and an evaluation path are used determine personnel numbers.

Selection IDs based on a function use a function module to collect data.

Note:

The selection based on the time administrator's ID is already included in the standard system.

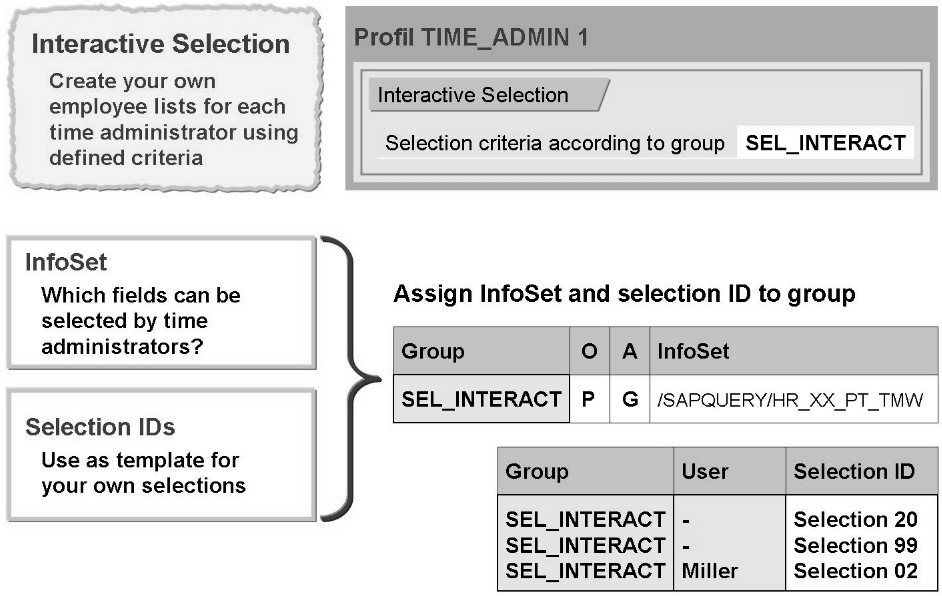


Figure 505: Customizing: Employee Lists - Interactive Selection

Using the interactive employee selection function, time administrators can create their own employee lists according to specified criteria.

To be able to do so, they must have a group for interactive in their profile that they use to access the TMW.

An infoset and optional selection IDs can be stored in a group for interactive selection. Time administrators can create their own employee selection using the criteria of the infoset and any specified selection IDs (templates).

An infoset provides time administrators with additional selection criteria (fields) to create their own employee selection.

If time administrators want additional employee lists (selection IDs) as templates for their own selections, then the corresponding selection IDs must be stored in the group for interactive selection.

The standard system contains the group TMW_INTERACTIVE with the infoset /SAPQUERY/HR_XX_PT_TMW.

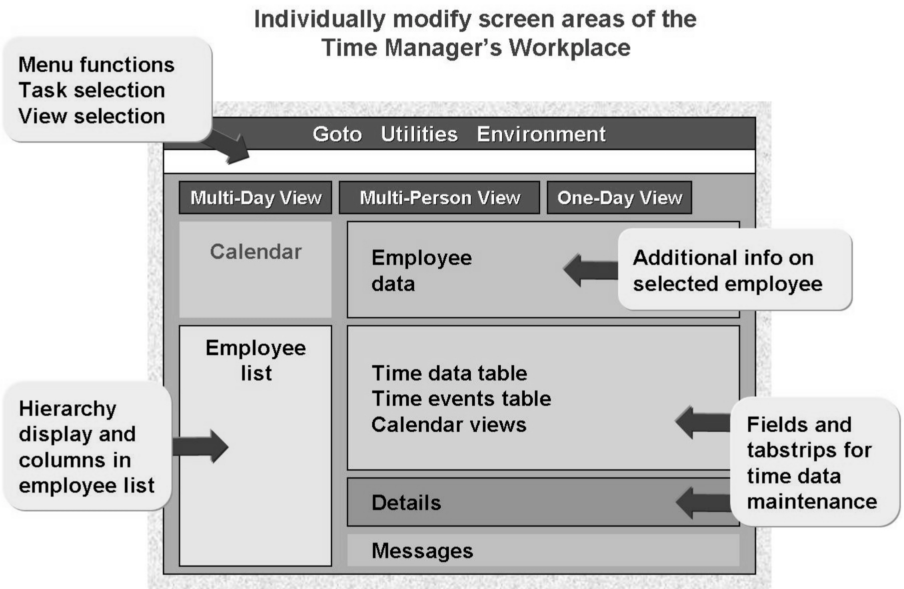


Figure 506: Modifying Screen Areas

The following **screen areas** can be customized using field selections:

Menu Design: Field selections for tasks, views, and menu functions

Employee List: Field selections for the columns to be displayed

Employee Data: Layout selections for the employee data to be displayed

Time Data/Time Events Tables/Calendar Views/Team View: Field selections for the fields/tabs to be displayed

Detail View: Field selections for the fields/tabs to be displayed

Message Processing: Show contextual information using display objects

The field selections are stored in the profiles used to access the TMW. The field selections displayed in the screen areas of the TMW are therefore dependent on the profile used by time administrators to access the application.

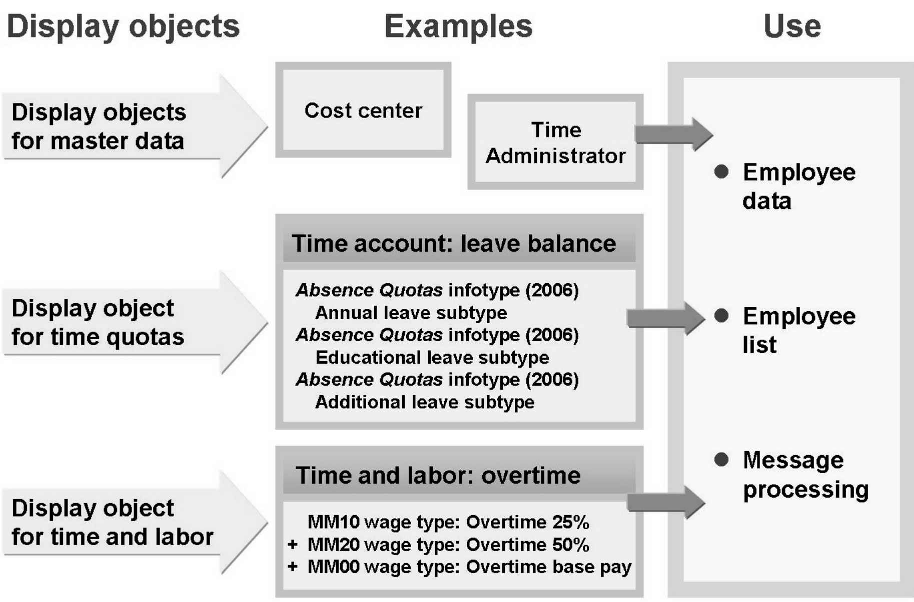


Figure 507: Basics: Using Information from Master Data and Time Data

To allow time administrators to view additional information about their employees regarding time accounts, time and labor data, and HR master data in the TMW, you must first define this information as **display objects**.

Display objects can be used in the layouts for Employee Data, for the columns in the Employee List, and for message processing. You can define display objects for HR master data, time accounts, and time and labor data. The standard system contains standard display objects; you can define additional display objects if required.

In a display object for **HR Master Data**, you specify the field whose values you want to display, in relation to an infotype and, if required, subtype.

To display time account balances, you must first define **quota types for reporting**. A quota type for reporting provides a consolidated view of quota data (attendance and absence quotas and monthly totals), in which you can group several quota types in one quota type for reporting. You then define the quota types for reporting as display objects.

To be able to display time and labor data, you must first define **time types for reporting**. In a time type for reporting, you can group employee time and labor data (such as attendances and absences, time types, and wage types). You then define the time type for reporting as a display object.

Time types and quota types for reporting are used for simulated infotypes and to transfer time and labor data to the SAP Business Information Warehouse (SAP BW).

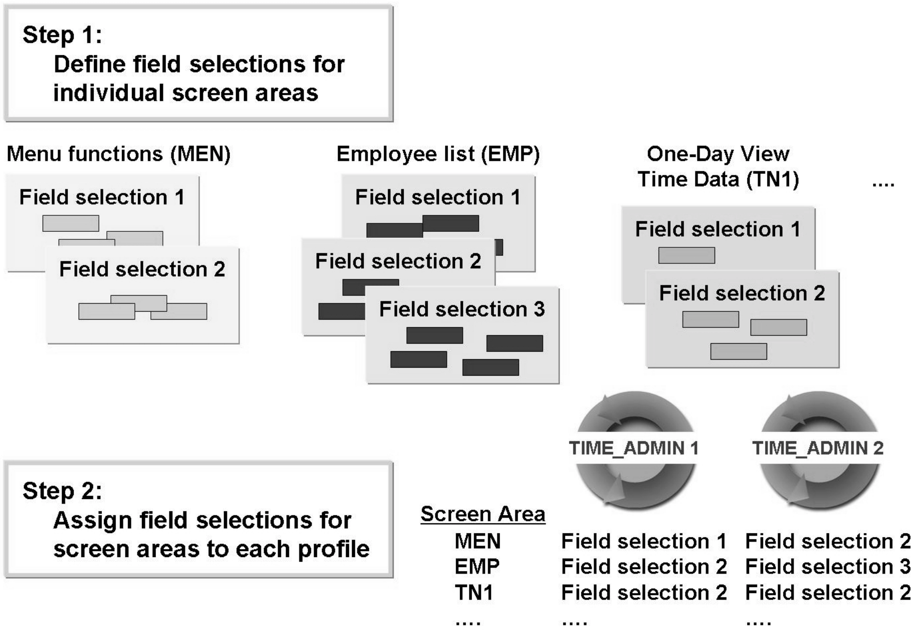


Figure 508: Field Selections

You create field selections in the same way for each screen area: From a set of objects (display objects, fields, and layouts), you group together the required subsets and define them as selections.

In the next step, you assign the selections for each screen area to the profiles.

In this way, you ensure that time administrators who access the TMW using a specific profile see the correct functions and fields they need to complete their tasks.

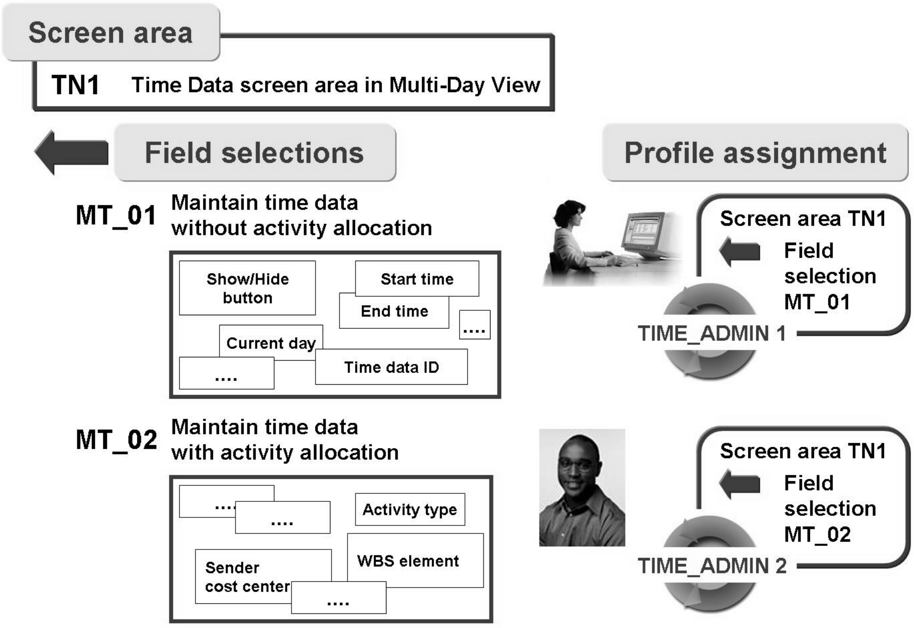


Figure 509: Field Selections in Multi-Day View

Example (for field selections for the *Multi-Day View* in the *Time Data* area):

The secretary Jane Martinez only maintains leave and illness days for employees; foreman David Grecco must also maintain activity allocation specifications, in addition to leave and illness.

You create two field selections, MT_01 and MT_02, whereby field selection MT_02 also contains the fields required for maintaining activity allocation data.

Jane Martinez and David Grecco access the TMW using different profiles.

Jane Martinez's profile contains the field selection MT_01 (for the Time Data area in the Multi-Day View); David Grecco's profile contains the field selection MT_02. In this way, both will see the fields they need in the Time Data area in the Multi-Day View.

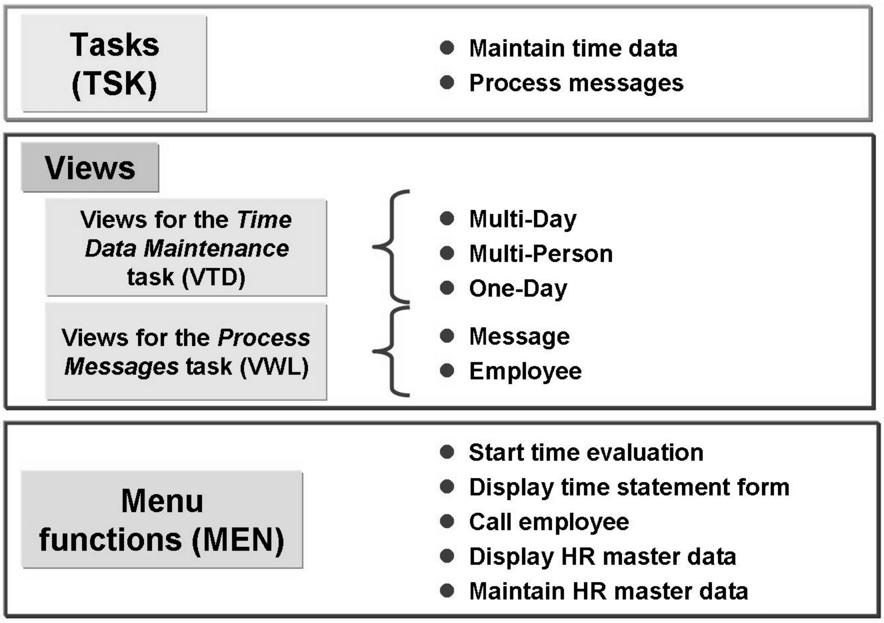


Figure 510: Field Selections for Tasks, Views, and Menu Functions

Different tasks, menu functions, and views can be made available to time administrators according to the profile they use to access the Time Manager's Workplace.

You can also define field selections for the menu bar and toolbar that appear in the following screen areas in the TMW:

Task selection (TSK):

Here you create field selections in which the *Time Data Maintenance* and the *Message Processing* tasks are valid, or only one of the tasks.

Views for the Maintain Time Data task (VTD):

Here you create field selections for the *Time Data Maintenance* task, in which various combinations of *Multi-Day, Multi-Person, One-Day View*, and the *Team View* are defined.

Views for Message Processing (VWL):

Here you create the field selections for the *Message Processing* task.

Menu functions (MEN):

You can also create field selections for other configurable menu functions. You can use field selections to include the following menu options: On the *Utilities* menu, for the *Start time evaluation, Display time statement,* and *Call employee* menu options; on the *Environment menu*, for the *Maintain HR master data* and *Display HR master data* menu options.

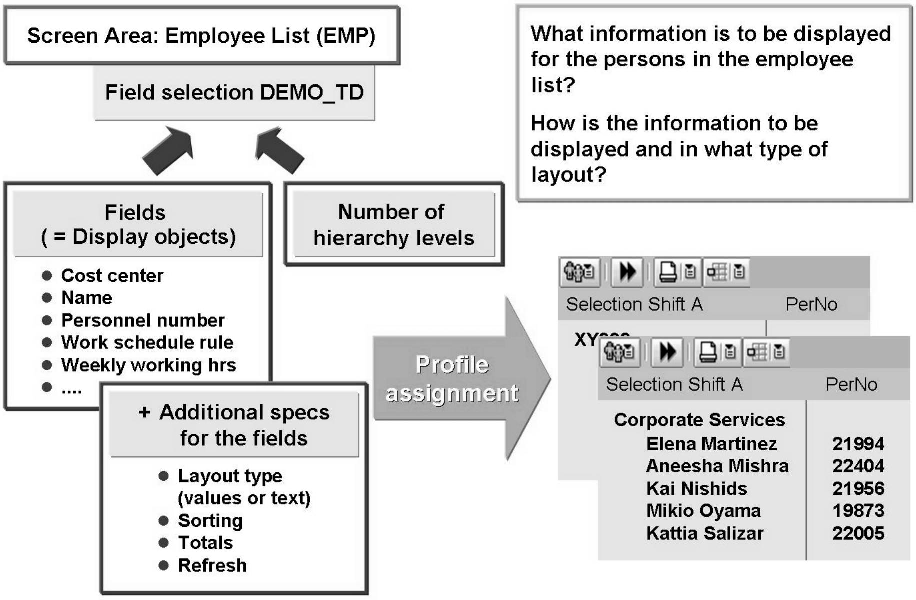


Figure 511: Field Selections for Employee Lists

The field selection for the Employee List determines which information is available to the time administrators (according to their profiles) for the employees in their employee lists. In addition, you can define the appearance of the Employee List by assigning a hierarchy display.

A field selection contains the fields (cost center, personnel number, and so on) that are to be displayed to the time administrators. The fields to be used must be defined as display objects. If the display objects contained in the standard system are not sufficient, you can create your own by carrying out the activities in the following IMG section: Personnel Time Management → Time Manager's Workplace → Basic Settings → Provide Information from Master Data and Time Data.

You can also enter additional specifications for displaying selected fields (field value, text for field value, or icons) to be used for sorting, updating, or totals.

The employee list can be displayed in a hierarchy with one or two levels, or without a hierarchy. To use a hierarchy, you assign a hierarchy layout to the field selection.

If the layout type selected is hierarchy, then the system uses the first field or the first two fields to represent the hierarchy. The fields not used for the hierarchy are displayed as columns.

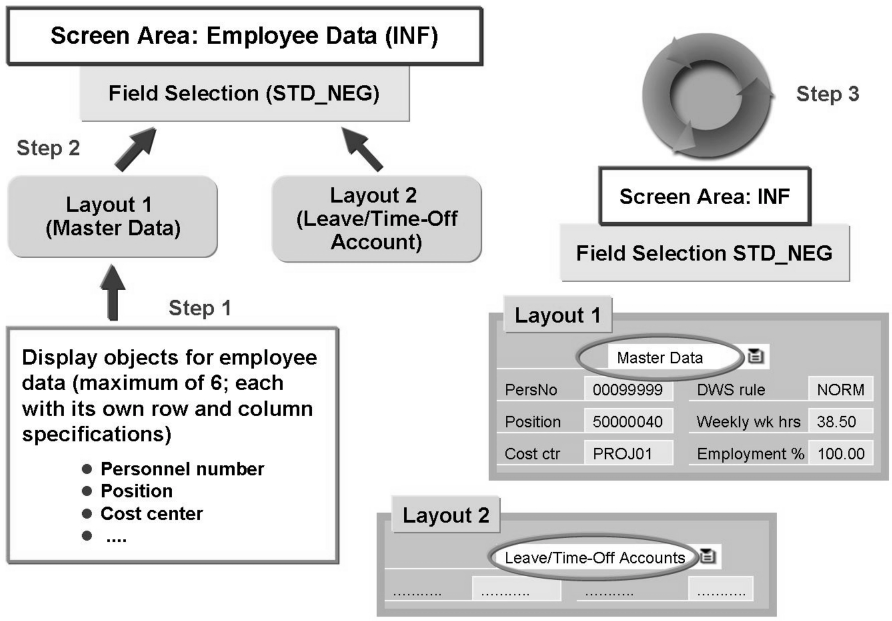


Figure 512: Layout Selection for Employee Data

In the *Employee Data* area, you can provide time administrators with additional information about the selected employee (such as HR master data or time account balances).

You define layouts in a first step. You can assign up to six display objects to a layout to display specific types of employee data (cost center, position, and so on). You also determine for each display object the position it is to have in the layout by indicating the column and row. A layout could thus contain fields such as the personnel number, position, cost center, and so on.

In a second step, you define field selections for the *Employee Data* area to which you then assign layouts. For example, you can define a field selection that is assigned layout 1 (with HR master data) and layout 2 (with time account balances).

In a third step, you assign each of the layout selections you want for employee data to the **profiles**. Time administrators to whom this field selection is assigned in their profiles will see the information from layout 1 as well as layout 2, and can toggle between the two different layouts.

Note:

If the display objects available in the standard system are not sufficient, you can define your own in the *Basic Settings* section of the IMG.

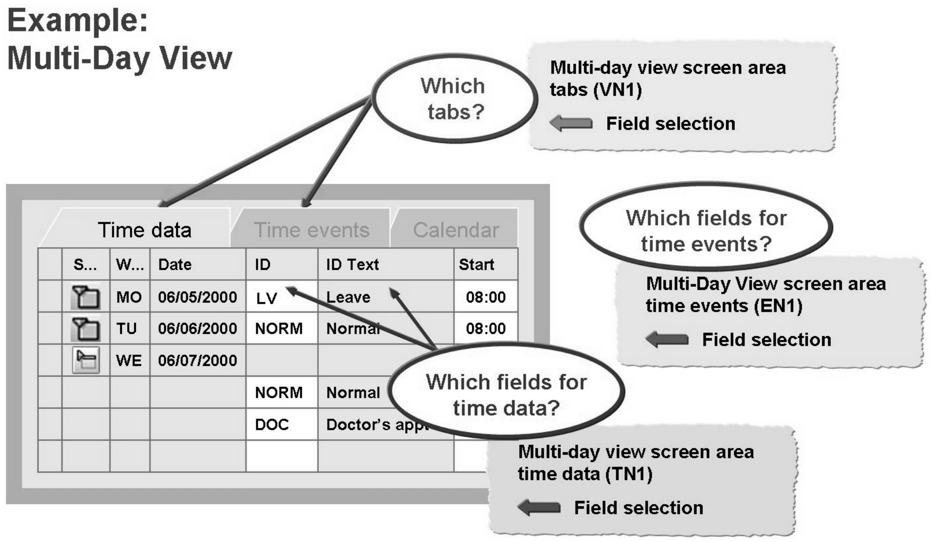


Figure 513: Field Selection for Maintaining Time Data (1)

To maintain time data in the *Time Data Maintenance* task in the TMW, time administrators have, depending on their profiles, up to four views available to them: the *Multi-Day View*, the *Multi-Person View*, the *One-Day View*, and the *Team View*. You can customize the fields of the time data table and the tab pages displayed in all views.

As time administrators only see the relevant fields (columns) and tabs they require in their views of the TMW, they have a more customized workspace for entering time data.

The procedure for customizing the time data table and the tabs displayed is the same for all views (Multi-Day, Multi-Person, and One-Day).

Example: **Multi-Day View**: In the *Define Table for Time Data* activity, you specify the fields (columns) you want to be displayed and their sequence. To do so, you define field selections for screen area TN1 and assign the required fields to the field selections. You can also enter additional specifications, such as the number of fixed columns and whether fields defined as "ready for input" can actually be used as such.

The multi-day view also incorporates the *Time Events* screen area, in contrast to the other views. Here you also define field selections, this time for screen area EN1, which determine the fields (columns) available and the sequence in which they are to be displayed.

You use field selections for the VN1 screen area to determine which tabs can be used for time data maintenance in the Multi-Day View.

Multi-Day View		
	Fields for time data	(TN1)
	Fields for time events	(EN1)
	Tabs	(VN1)
	Calendar: Time data to be selected	(CAI)
	Calendar: Select views	(CAL)
	Calendar: Dominant fields	(CAD)
	Calendar: Apptmts w. clock times	(CAA)

Multi-Person View		
	Fields for time data	(T1M)
	Tabs	(V1M)

One-Day View		
	Dominant and processing instructions	(TDO)
	Fields for time data	(T11)
	Tabs	(V11)

Figure 514: Field Selection for Maintaining Time Data (2)

You define field selections for the other views in the same way. Each view has screen areas for which you can define field selections (see the figure above).

In the One-Day View, there is an additional screen area above the Time Data area, in which you can display the day dominant and checkboxes for processing instructions. The checkboxes are only relevant for time evaluation. To determine which, if any, of these fields are to be displayed in the One-Day View, you define applicable field selections for the TDO screen area.

Note:

If the tabs contained in the standard system are not sufficient for your purposes, you can create your own. To do so, copy the sample layouts provided by SAP. You must copy the templates to create your own tabs because they contain certain technical settings that are required for creating new tabs.

Note:

The settings for the *Time Data* screen area in the *Multi-Day View* are relevant for the *Time Data Maintenance* and the *Message Processing* tasks.

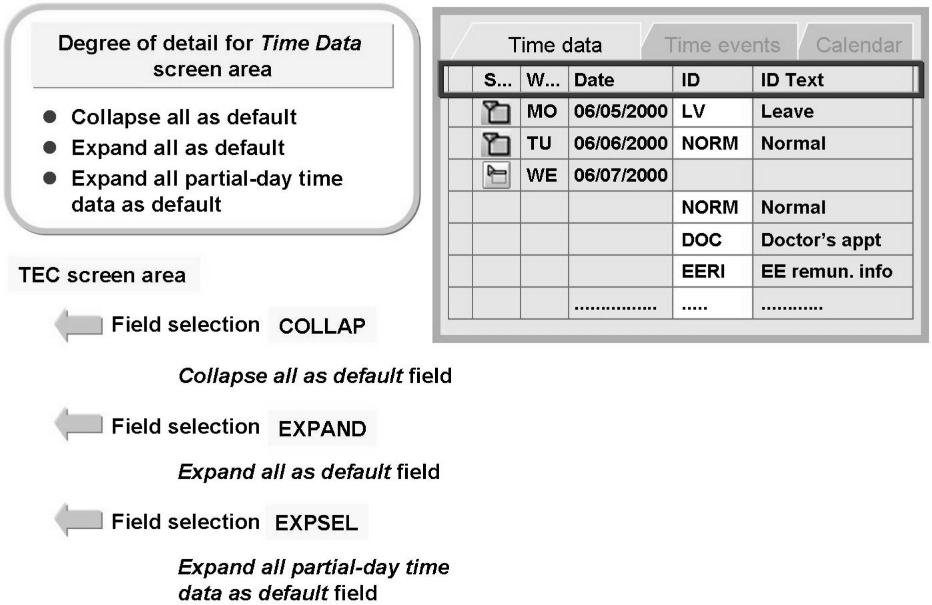


Figure 515: Field Selection for Maintaining Time Data (3)

In the Time Data screen area, you can have the system expand or collapse rows containing time data. Rows containing the dominants of the day are always shown.

The field selections specifying the degree of detail in the Multi-Day and Multi-Person Views indicate whether all rows are expanded or collapsed when the TMW is called, or only rows containing partial-day time data are to be expanded.

Once all of the tab and field selections have been created for the individual screen areas, you must then assign the selections to your profiles.

Note:

The customer enhancement **PTIMTMW** is available for the TMW. You can use this enhancement to customize how fields are filled. After activating the enhancement, your new fields must be added to the field selection for time data in the individual views. These fields cannot be used in the Time Events screen area.

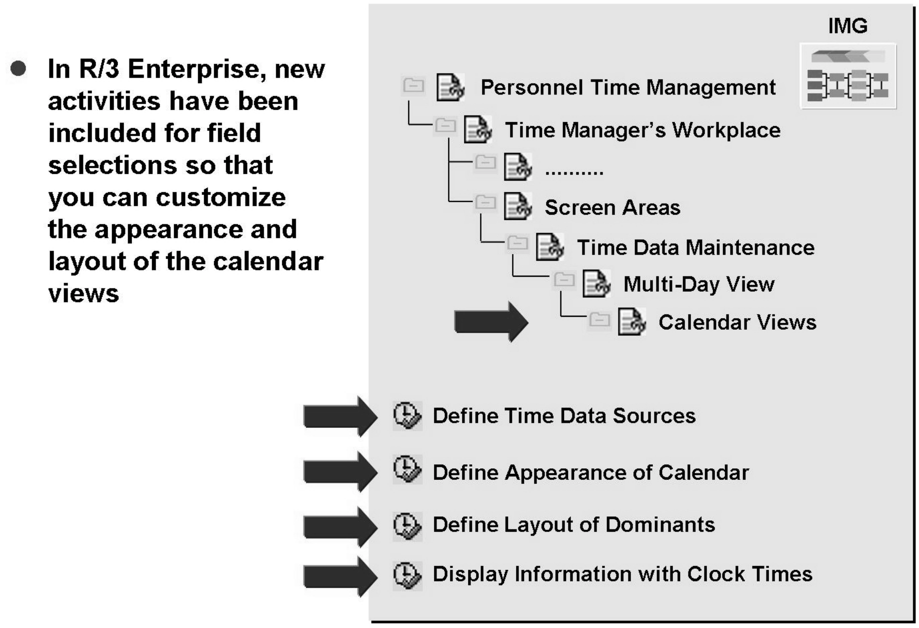


Figure 516: Customizing Field Selections for Calendar Views

There are new activities for customizing the new field selections for the calendar. You can configure all four calendars, that is, the daily, weekly, monthly, and annual calendar.

The procedure is the same as for the field selections for other screen areas.

In the first step, you define the data sources from which you want to display information in the calendars. You can display data from the following sources:

Time data from the time infotypes supported by the TMW, with the exception of the Time Events infotype (2011)

Time pairs formed from the time events in the PT table (cluster B2), or in the TEVEN table if time evaluation was unable to form pairs for the period

Time events from the TEVEN table. If you want to display a lot of time data, you can choose to display the time events instead of the time pairs. This reduces the amount of information displayed in parallel in the calendar.

In the second step, you determine the information you want to be displayed in each calendar.

To can restrict the amount of information displayed so that the calendars are not overloaded. This is particularly important for the monthly and annual calendars so that they fit onto the screen without users having to scroll.

The information to be displayed in the calendar is divided in the activity into information blocks such as the dominant, planned time, data without clock times (such as full-day records, employee remuneration information), and so on. You can decide which of the information blocks you want to be displayed and their sequence.

In the third step, you specify the information that you want to output in the dominant row of the daily, weekly, and monthly calendar. You can vary the amount of information displayed according to the calendar type.

You can output fields from the following infotypes in the dominant row:

Planned Working Time (infotype 0007)

Absences (infotype 2001)

Attendances (infotype 2002)

Substitutions (infotype 2003)

You can also output customer fields in the dominant row. Three text fields and three hours fields are available. You can use the PTIMTMW SAP enhancement to fill the customer fields.

In the fourth step, you define how partial-day information with clock times is displayed.

When partial-day information is displayed in the weekly or daily calendar, there are often several rows available for time entries lasting several hours.

You can use these rows to display additional information about a time entry. Depending on how many additional lines are available, you may output a lot of additional information. In this activity, you specify the type and sequence of the information you want to display.

- **In R/3 Enterprise, new activities have been included for field selections so that you can customize the appearance and layout of the team view.**

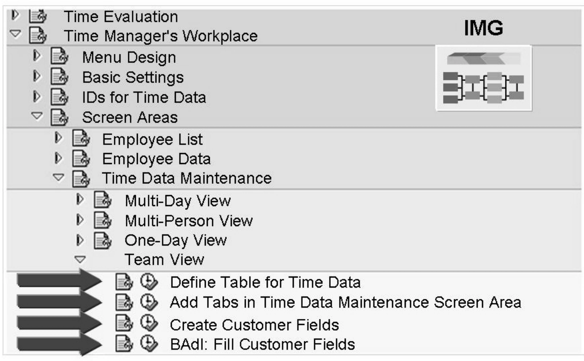


Figure 517: Customizing Field Selections for the Team View

In the R/3 Enterprise release, there are new activities for customizing the new field selections for the team view. The procedure is the same as for the field selections for other screen areas. In the TNM screen area, you can define additional fields for the dominant, such as clock times, number of hours, breaks, or customized information.

In addition, in the team view you can fill and display customer-specific fields such as the number of employees off sick or on vacation. You can customized where you want the data to be displayed: on the left or right, at the top or bottom of the screen area. You can use the sample BAdI PT_TMW_NM_BADI_EXMPL to fill the fields with the required data.

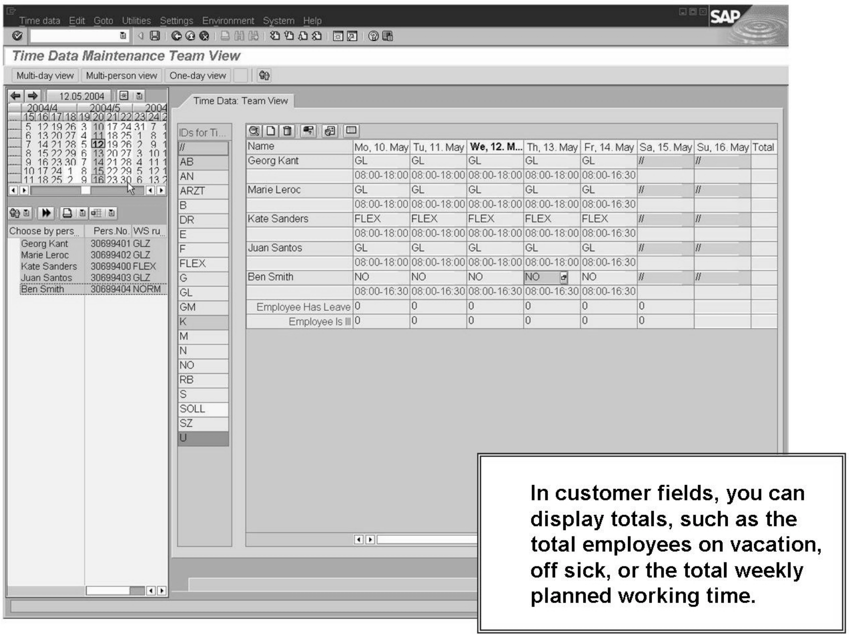


Figure 518: Displaying Customer-Specific Information

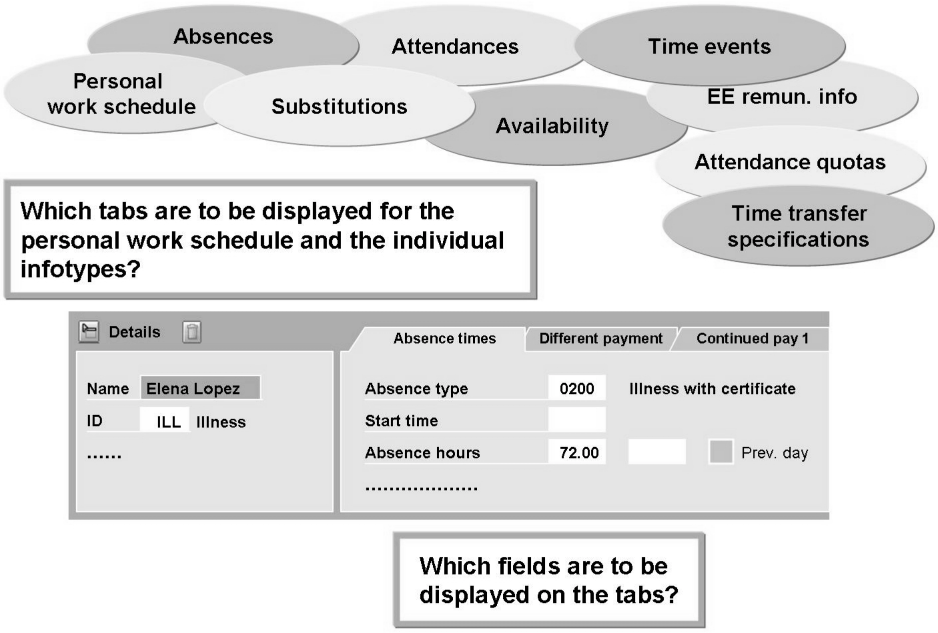


Figure 519: Define Detail Screens (1)

You can create tab and field selections for the Details area of the TMW and assign them to the required profiles.

A fixed number of tabs are available for the *Details* area for each infotype and for the personal work schedule. Certain fields can be displayed on the tabs.

The procedure for defining the the tab or field selections is the same for all infotypes and the personal work schedule.

In a first step, you create tab selections in which you specify which tabs are to be shown and in what sequence. If necessary, you can change the names of the tabs.

In a second step, you create field selections that specify which fields are to be displayed for each infotype or personal work schedule.

In a third step, you assign the tab and field selections to the profiles.

Note:

This option is mainly relevant for absences, and only partly applicable for attendances.

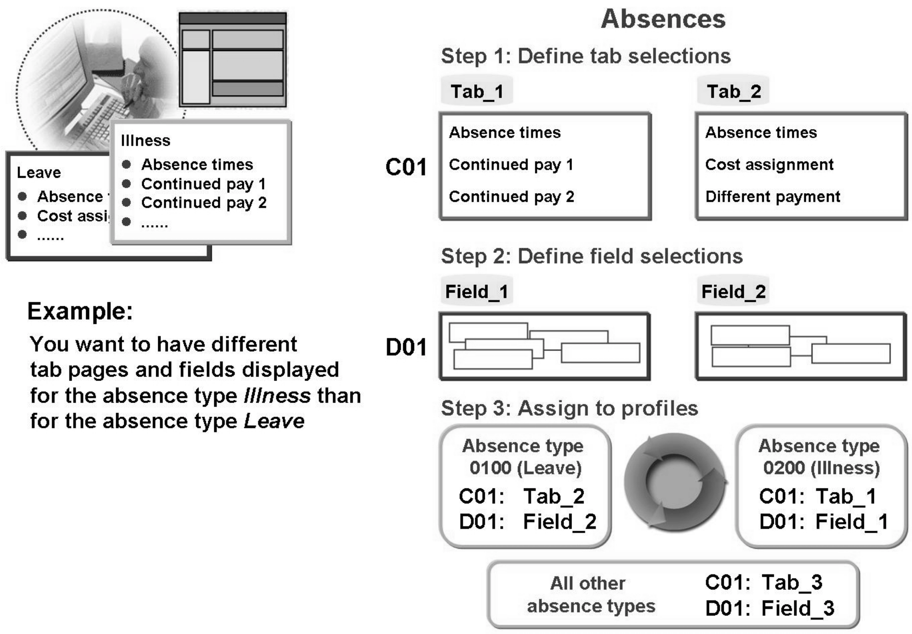


Figure 520: Define Detail Screens (2)

Tab and field selections can be assigned in a profile to specific subtypes according to the infotypes. In this way, you can display different tabs and fields for different subtypes of an infotype. If not all of the subtypes are to be assigned their own tab and field selections, you can assign the value *All other..(subtypes)* in the profile.

Note:

If no tab or field selections are entered for a profile for the Details area, the system will display all of the tabs and fields available in the standard system. Example:

You want to display the tabs *Absences, Continued Pay 1*, and *Continued Pay 2* for subtype **0200 (Illness)** of the *Absences* infotype (2001). For subtype **0100 (Leave)** of the same infotype, you want the tabs *Absence Times, Cost Assignment Receiver 1*, and *Different Payment* to be displayed.

In a first step, you create the tab selections "Illness" and "Leave." Then, in a second step, you create the field selection(s). In a third step, you assign the *Leave* tab selection to the subtype 0100 in the profile and the *Illness* tab selection to subtype 0200. You can also specify additional tab selections for other subtypes of the *Absences* infotype (2001).

As of the R/3 Enterprise release, a *Deduction* tab page is also available. You can incorporate it in the detail views of the *Absences, Attendances*, and *Attendance Quotas* infotypes. In the Absences and Attendances infotypes, it displays the quota

records from which the absence or attendance was deducted. In the *Attendance Quotas* infotype, it displays the attendances that have been deducted from the attendance approval.

- 510705: TMW: Customizing entries are not transported
- 514565: TMW does not write ALE pointer
- 455468: TMW: Message line in the upper screen area
- 447097: Questions and answers on the TMW implementation
- 421014: TMW calendar views - availability on 4.6C
- 415425: Transport of Customizing Settings
- 407303: Employee dialog box in the Time Manager's Workplace
- 392621: Preparation for color concept in Time Manager's Workplace
- 383750: BAdI for individual payroll days and hours
- 367301: TMW: Generation report for TCVIEW Customizing
- 367249: Customer enhancements for the BLP
- 201882: Time Manager's Workplace under Release 4.6B
- 598985: TMW Team View

The above slide shows a collection of the most important OSS notes. Please note that new SAP Notes about the topic are added continuously. To provide you with the most up-to-date information, SAP development continuously updates the consulting note 447097: "Questions and answers on the TMW implementation."

You can access the SAP Notes in your OSS system, or in the Internet under http://service.sap.com/notes. You can request a user for the service portal free of charge.

- SAP OSS
  - Component: PT-RC-UI-TMW (Time Manager's Workplace)
  - Consulting note 447097 (Questions and answers on the TMW implementation)
- Internet
  - http://service.sap.com/hrtime (SAP Service Marketplace)
  - Then choose Time Manager's Workplace / Media Center
  - TMW calendar views
  - Reports of TMW implementations
  - New features in the SAP Enterprise release
  - ScreenCams showing new TMW features

If you have questions about the Time Manager's Workplace, the above sources provide you with detailed information.

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Exercise 38: Using and Customizing the Time Manager's Workplace

Exercise Duration: 30 Minutes

Exercise Objectives

After completing this exercise, you will be able to:

- Use the TMW and customize it to meet the requirements of time administrators in your enterprise

Business Example

A variety of tasks are performed by time administrators in your company. By using different profiles, you can set up the TMW to meet the requirements of each task administrator. You carry out the required Customizing steps and create suitable time data IDs and profiles for the time administrators at the company.

System Data

System: [Tell the participants the system in which they are to carry out this exercise – T10, for example.]
Client: [Tell them which client of the system they are to use.]
User ID: [Specify the user ID for this exercise. The standard format for a user ID is the course number followed by the group number, for example, AC010-##.]
Password: [Specify the password to be used for the exercise.] The standard initial password is INIT.]

CATT: [If a CATT is required, enter the name of it. If not, delete this.]
Set up instructions:

1. [Enter all information required in the exercise.]

Task:

Create time data IDs

1. Modify the definition set **SET_XX** to include additional time data IDs that will enable special absence types and changes to planned specifications to be recorded in the Time Manager's Workplace.

   Create the following time data IDs:

   Time data ID **L## (Leave group ##)** (where ## = your group number) for the absence type you previously created, **LE## (Leave)**:

Continued on next page

Absences (infotype 2001)

Personnel subarea grouping **01**

Absence type **LE##**

Time data ID **N## (Normal group ##)** (## = your group number) for the following change in planned specifications:

Substitutions (infotype 2003)

Personnel subarea grouping **01**

Daily work schedule grouping **01**

Substitution type **02**

Daily work schedule **TZ##**

For the time data IDs you created in 1-1, determine how they are to be used within the subsets of definition set **SET_XX**.

Check whether the subsets **001** and **002** are already available in the definition set **SET_XX**.

Define the use of time data IDs for subset **002** in the definition set **SET_XX** so that time administrators can record time data using these time data IDs.

To do so, indicate that the newly created time data IDs are to be *default IDs* for subset **002**.

Find out about the difference between the indicators for *default IDs* and *input IDs*.

Define colors for the calendar view for your own time data IDs, **L##** and **N##**, in the **SET_XX** definition set.

Choose the colors of your choice in the IMG activity *Define Colors of Time Data IDs*.

Check that your settings were made correctly by exiting and reentering the TMW.

2. **Creating Profiles**

   Copy profile *Z_HR306_TIME_ADMIN* to profile *Z_##_TIME_AD* (## = group number).

   Modify the *initial period* and the *person selection period* for your profile as follows:

   The *initial period* is to comprise four weeks: the previous week, the current week, and the next two weeks. The first day of the week is a Monday.

   The *person selection period* is to comprise one month before and one month after the initial period.

Continued on next page

Make sure that time administrators to whom this profile is assigned are only able to access the applicable subset of IDs for this definition set.

3. **Access the Time Manager's Workplace**

   In your user parameters, store the following values for the *Time Manager's Workplace*:

   Definition set *SET_XX*

   ID Subset *002*

   Profile **Z_##_TIME_AD** (where ## is your group number)

   Now access the *Time Manager's Workplace*.

4. **Optional Exercise: Employee Selection**

   Check the user-independent standard selection stored in your profile **Z_##_TIME_AD** (## = your group number).

   Which selection IDs are assigned?

   Create for your user **HR306-##** (## = your group number) a user-specific selection which you can use to select all employees in personnel subarea **TP##** (## = your group number).

   Define the selection ID **Z_##** (## = your group number) to be used to select according to personnel subarea.

   Assign this selection ID to the group **Z_USER_HR306** for your own user, **HR306-##**.

   Assign the new user-specific selection to your profile.

5. **Menu Design**

   You want the **Z_##_TIME_AD** profile (XX = your group number) to enable time administrators to access the following tasks, views, and menu functions:

   Time Data Maintenance task

   All views are to be available for this task

   The following *menu function* is to be available for this task: Display master data

   Check whether the corresponding field selections are already available. Pay particular attention to the time data IDs for the field selections. Assign the field selections to your profile **Z_##_TIME_AD** (## = your group number).

6. **Modify the *Time Data* screen area**

   Modify the *Multi-Day View for Time Data* as follows:

   Define a field selection for the time data table in the Multi-Day View

Continued on next page

Define the field selection **MD_##** (## = your group number) for the *Multi-Day View* of the time data table. Display the following fields:

Show/hide button

Weekday ID

Current date

More time data exists

Time data ID type

Time data ID text

Start time

End time

Duration of time data record in hours

Cost center

Specify the appearance of the calendar

Define a separate annual view, **##YEAR**, by copying the **306YEAR** annual view. You want the new annual view to contain the following additional information

Time data with clock times

This enables you to view partial-day records as well (such as Georg Kant's (30699401) doctor's appointment in January 2002). To be able to do so, you have to assign the setting to your profile, as described in 6-4.

Select tabs for the *Multi-Day View*

When users access the TMW using the profile you defined, you only want the *Time Data* tab, not the *Time Events* tab, to appear in the *Multi-Day View*.

Check whether a suitable field selection is already available.

Profile Assignment

Assign the field selection **MD_##** (## = your group number) you defined in 6-1 for time data in the *Multi-Day View*, the Customizing settings for the appearance **##YEAR** from 6-2, and the tab selection you checked in 6-3 for the *Multi-Day View* to your profile.

Check the degree of detail assigned to your profile. What does the degree of detail determine?

7. **Specify details for the time data**

   You only want information on the absence times and technical information for absence type **LE##** to appear in the Details screen area.

Continued on next page

Define the field selection **2001_##** (## = your group number) for the *Absences* infotype (2001) which is to include the following tabs:

Absence times

Technical information

All of the fields are to be included on the selected tabs. In other words, you do not need to hide fields explicitly.

Assign the tab selections defined under 6-1 to the absence type **LE##** (## = group number) in your profile.

Use the personnel subarea grouping **01**.

8. **Check your settings for the TMW**

   Access the TMW again and check the following settings:

   Initial period

   Tasks, views, and menu functions

   Tabs and fields for the *Time Data* screen area in the *Multi-Day View*

   Tabs for the absence type LE## (## = your group number) in the *Details* screen area:

   Enter a one-day absence **LE##** for one of your employees using the time data ID **L##** (## = your group number) in the TMW. Check which tabs are available for this absence type in the *Details* screen area.

   Note: If you have not completed the optional exercise on employee selection, then add your employees (**306991##** and **306992##**) temporarily to your employee list.

   Available employee lists

9. **Additional Exercises: Using the TMW Calendar Views**

   Optional Exercises for the TMW Calendar Views

   Use the TMW calendar views to display time data in tasks 9-1 and 9-2, and to maintain time data in task 9-3.

   (Please display, but do not maintain any data for Georg Kant, since all course participants have to access this personnel number.)

   Which work schedule is assigned to Georg Kant (30699401) in January 2002? (Use the calendar views, for example, the annual calendar.)

   When did Georg Kant (30699401) have a doctor’s appointment in January 2002? (Use the monthly calendar and the daily calendar.)

   Maintain time data using the calendar views:

Continued on next page

Your employee Jane Miller (306993##, insert temporarily) had a doctor's appointment from 4 p.m. through 4:30 p.m. every Friday in the last month. Maintain this data using the copy and paste functions.

Your employee Jane Miller (**306993##**, insert temporarily) would like to take a week of leave next month. Enter the leave using the monthly or weekly calendar and the time data ID "L."

Solution 38: Using and Customizing the Time Manager’s Workplace

Task:

Create time data IDs

1. Modify the definition set **SET_XX** to include additional time data IDs that will enable special absence types and changes to planned specifications to be recorded in the Time Manager’s Workplace.

   Create the following time data IDs:

   Time data ID **L## (Leave group ##)** (where ## = your group number) for the absence type you previously created, **LE## (Leave)**:

   Absences (infotype 2001)

   Personnel subarea grouping **01**

   Absence type **LE##**

   Time data ID **N## (Normal group ##)** (## = your group number) for the following change in planned specifications:

   Substitutions (infotype 2003)

   Personnel subarea grouping **01**

   Daily work schedule grouping **01**

   Substitution type **02**

   Daily work schedule **TZ##**

   For the time data IDs you created in 1-1, determine how they are to be used within the subsets of definition set **SET_XX**.

   Check whether the subsets **001** and **002** are already available in the definition set **SET_XX**.

   Define the use of time data IDs for subset **002** in the definition set **SET_XX** so that time administrators can record time data using these time data IDs.

   To do so, indicate that the newly created time data IDs are to be *default IDs* for subset **002**.

   Find out about the difference between the indicators for *default IDs* and *input IDs*.

   Define colors for the calendar view for your own time data IDs, **L##** and **N##**, in the **SET_XX** definition set.

Continued on next page

Choose the colors of your choice in the IMG activity *Define Colors of Time Data IDs*.

Check that your settings were made correctly by exiting and reentering the TMW.

a) **Create time data IDs**

In the Implementation Guide (IMG) for Personnel Time Management, choose *Time Manager's Workplace → IDs for Time Data → Specify Definition Sets and IDs.*

To check whether the definition set **SET_XX** was already created, choose the *Create Definition Sets* activity. Make sure that an entry already exists for the definition set **SET_XX**.

To create additional time data IDs for the definition set **SET_XX**, choose the *Define Time Data IDs for Each Time Data Type* activity:

Create time data ID L## (## = your group number):

Choose *New entries*. In the next screen, choose the *Absences* tab and enter the following data:

Field Name	Value
Definition set	*SET_XX*
ID	*L## (## = your group number)*
Short text	*Leave Group ##*
PS grouping	*01*
Absence type	*LE##*

Create time data ID N## (## = your group number):

Choose *New entries* or *Goto → Next entry*, leave the *Planned Specifications* tab as the default, and enter the following data:

Field Name	Value
Definition set	*SET_XX*
ID	**N##** (## = your group number)
Short text	*Normal Group ##*
PS grouping	*01*
DWS grouping	*01*
Substitution type	**02** (shift substitution)
Daily WS	*TZ## (or S-11)*

Continued on next page

Save your entries. Then choose *Back* to return to the *Change View "Define Time Data IDs": Overview* screen.

Using Time Data IDs

To check whether subsets **001** and **002** are available for the definition set **SET_XX**, choose *Personnel Time Management → Time Manager's Workplace → IDs for Time Data → Define Subsets and IDs*.

Then choose the *Create Subsets for Time Data IDs* activity. Subsets **001** and **002** ought to be available in the following view for definition set **SET_XX**.

Choose the *Specify Use of IDs for a Subset* activity to determine how the time data IDs you created for subset **002** in the definition set **SET_XX** are used.

In the following dialog box, enter **SET_XX** as the definition set and **002** as the subset.

In the following view, activate the *Default ID* radio button for the time data IDs **L##** and **N##** you created (## = your group number).

All of the time data IDs you created must be assigned as *Default* time data IDs, because each of the IDs is only valid for one subtype of the corresponding infotype. If more than one subtype of an infotype were to be represented by a time data ID, then one of the subtypes would have to have the indicator *Default ID* and the other the indicator *Input ID*.

Define colors for the calendar view for your own time data IDs, U## and N##, in the SET_XX definition set.

Choose the colors of your choice in the IMG activity *Define Colors of Time Data IDs*.

Go to the *Define Colors of Time Data IDs* activity in the IMG.

Enter **SET_XX** as the definition set. Select new entries and enter your time data IDs **L##** and **N##** in the list and select a color of your choice for each, for example, red for **L##** and green for **N##**. Save your data.

Check that your settings were made correctly by exiting and reentering the TMW.

2. **Creating Profiles**

   Copy profile *Z_HR306_TIME_ADMIN* to profile *Z_##_TIME_AD* (## = group number).

   Modify the *initial period* and the *person selection period* for your profile as follows:

Continued on next page

The *initial period* is to comprise four weeks: the previous week, the current week, and the next two weeks. The first day of the week is a Monday.

The *person selection period* is to comprise one month before and one month after the initial period.

Make sure that time administrators to whom this profile is assigned are only able to access the applicable subset of IDs for this definition set.

a) **Creating Profiles**

To copy profile *Z_HR306_TIME_ADMIN* to profile *Z_##_TIME_AD* (## = group number), choose *Time Manager's Workplace → Menu Design → Create Profiles and Assign Field Selections* in the IMG for Personnel Time Management.

In the following view, select profile **Z_HR306_TIME_ADMIN** and then choose the *Copy as...* button or *Edit → Copy as...*.

Rename your copy **Z_##_TIME_AD** (## = group number) as your profile template and then give your profile its own name. Choose *Enter* and confirm the information box that appears by choosing *Enter*. The *Change View "Define Profile": Overview* screen reappears. Save your entries.

Modify Initial Period and Person Selection Period

In the *Change View "Define Profile": Overview* screen, select the profile you created, **Z_##_TIME_AD**, and then choose the *Details* button or *Goto → Details*.

In the *Initial Period* screen area, enter the following data:

Field Name	Value
Period	*Current week*
Relative position period	-
Direction	-
Relative start date	*1 week*
Relative end date	*2 weeks*
Week beginning	*Monday*

In the *Selection period relative to initial period* screen area, enter the following data:

Continued on next page

Field Name	Value
Relative start date	*1 month*
Relative end date	*1 month*

Access defined subset of a definition set

To make sure that time administrators who are assigned the **Z_##_TIME_AD** profile can only access their specific subset of IDs for the corresponding definition area, scroll down on the *Further Settings* tab. Make sure that the *Subset IDs can be changed* option is not activated.

3. **Access the Time Manager's Workplace**

   In your user parameters, store the following values for the *Time Manager's Workplace*:

   Definition set *SET_XX*

   ID Subset *002*

   Profile **Z_##_TIME_AD** (where ## is your group number)

   Now access the *Time Manager's Workplace*.

   a) **Accessing the Time Manager's Workplace**

   To store the **Z_##_TIME_AD** profile and the definition set **SET_XX** with subset **002** in the user parameters for your user, choose:

   System → User Profile → Own Data.

   In the *Maintain User Profile* screen, choose the *Parameters* tab and enter the following data:

Parameter	Value
PT_TMW_PROFILE	*Z_##_TIME_AD*
PT_TMW_TDLANGU	*SET_XX/002*

   where ## = your group number

   To access the *Time Manager's Workplace*, choose:

   Human Resources → Time Management → Administration → Time Manager's Workplace

4. **Optional Exercise: Employee Selection**

   Check the user-independent standard selection stored in your profile **Z_##_TIME_AD** (## = your group number).

Continued on next page

Which selection IDs are assigned?

Create for your user **HR306-##** (## = your group number) a user-specific selection which you can use to select all employees in personnel subarea **TP##** (## = your group number).

Define the selection ID **Z_##** (## = your group number) to be used to select according to personnel subarea.

Assign this selection ID to the group **Z_USER_HR306** for your own user, **HR306-##**.

Assign the new user-specific selection to your profile.

a) **Check the user-independent standard selection in the Z_##_TIME_AD profile.**

In the IMG, choose *Personnel Time Management → Time Manager's Workplace → Employee Selection → Assign Employee Selection to Profiles*.

Select your profile **Z_##_TIME_AD** and then choose the *Details* button or *Goto → Details*.

In the subsequent screen, the following setting should be made in the *Settings* tab in the *Standard selection using selection criteria* section of the *Employee selection* area:

Multiple users selections according to group	*Z_TMW_HR306*

To check which selection IDs are assigned to this group, choose *Personnel Time Management → Time Manager's Workplace → Employee Selection → Define Groupings*.

In the subsequent screen, select the **Z_TMW_HR306** group and then double-click the *Grouping* option in the *Dialog Structure* in the left area of the screen.

The selection ID **TMW_TIME_ADMIN** and another selection ID specifically set up for the HR306 course should already be assigned, that is, the following entries should be displayed:

Group	User	Seq...	Sel.ID
Z_TMW_HR306		*001*	*Z_HR306_PERNR*
Z_TMW_HR306		*002*	*Z_HR306_TMW_TIME_AD*

Meaning of Selection IDs:

Continued on next page

Z_HR306_PERNR:

The selection ID **Z_HR306_PERNR** was created specifically for the HR306 course. Personnel numbers from **30699400 – 30699404** are included in the selection.

Z_HR306_TMW_TIME_AD:

Selection ID **TMW_TIME_ADMIN** is included in the standard system. It is used to select all of the employees who are assigned to an administrator by means of the administrator ID in the *Time* field of the *Organizational Assignment* infotype (0001).

Create a user-specific selection

To define a selection ID to select all employees in the personnel subarea **TP##** (## = your group number), choose *Personnel Time Management → Time Manager's Workplace → Employee Selection → Define Selection IDs*.

Choose the *New entries* option, or choose *Edit → New entries*.

In the screen area on the right, enter the following data:

Selection ID	Selection text
Z_##	*Selection by personnel subarea TP##*

Choose *Enter* to confirm your entries and then save your data.

Select this entry and double-click on the *Table* option from the dialog structure in the screen area to the left.

Choose *New entries* and enter the following data:

Sel.ID	Seq..	Seq..	Obj.class	Inf...	Field name	Field type
Z_##	*1*	*1*	*Persons*	0001	*BTRTL*	*Infotype field*

No entries are required in the other remaining fields.

Save your entries.

Select this entry and double-click on the *Ranges* option from the dialog structure in the left screen area.

Choose *New entries* and enter the following data:

Continued on next page

Selection ID	No.	No.	No.	INCL/EXCL	Option	Selection value
Z_##	*1*	*1*	*1*	*1*	*EQ*	*TP##*

= your group number

No entries are required in the other remaining fields.

Save your entries.

To assign the defined selection ID to group **Z_USER_HR306** for specific users, choose *Personnel Time Management → Time Manager's Workplace → Employee Selection → Define Groupings*.

In the right screen area, select group **Z_USER_HR306** and then choose the *Grouping* option in the left screen area in the dialog structure.

Enter the following data:

Group	User	Seq.no.	Sel.ID
Z_USER_HR306	*HR306-##*	*Any number*	*Z_##*

where ## = your group number

Enter any number as the sequential number.

Save your entries.

To assign the new user-specific selection to your profile, choose *Personnel Time Management → Time Manager's Workplace → Employee Selection → Assign Employee Selection to Profiles*.

Select your profile **Z_##_TIME_AD** and then choose the *Details* button or *Goto → Details*.

In the *Employee Selection* area, enter the following data in the *Standard selection using selection criteria* area:

User-specific selections according to group	*Z_USER_HR306*

Save your entries.

5. **Menu Design**

You want the **Z_##_TIME_AD** profile (XX = your group number) to enable time administrators to access the following tasks, views, and menu functions:

Time Data Maintenance task

Continued on next page

All views are to be available for this task

The following *menu function* is to be available for this task: Display master data

Check whether the corresponding field selections are already available. Pay particular attention to the time data IDs for the field selections. Assign the field selections to your profile **Z_##_TIME_AD** (## = your group number).

a) **Menu Design**

In the IMG for Personnel Time Management, choose *Time Manager's Workplace →Menu Design*.

Check field selections for the tasks

To do so, choose the *Define Task Selection* activity.

Select the field selection **TDE** (for the *Maintain Time Data* task) and then double-click on the *Field Customizing* option from the *Dialog Structure*. Only the *Maintain time data* field (that is, the task) should be assigned to the field selection **TDE**.

Screen area	**Field selection**
TSK (task selection)	*TDE*

Check field selections for the task views

To check the field selections for the views for the tasks, choose the *Define Views for Tasks* option.

Choose the *Define Views for Time Specifications Tasks* activity.

Select the field selection **ALL** (*All Views: Multi-Day, Multi-Person, One-Day*) and then double-click on the *Field Customizing* option from the *Dialog Structure*. The *Multi-Day, Multi-Person*, and the *One-Day* fields (that is, the views) should be assigned to the field selection **ALL**.

Screen area	Field selection
VTD (Views for the *Maintain Time Data* task)	*ALL*

Check field selections for menu functions

To check the field selections for the menu functions (for the *Maintain Time Data* task), choose the *Define Menu Functions* step in the IMG.

Then choose the *Define Menu Functions* activity.

Continued on next page

Select the field selection **Z_HR306** (*Display Only Master Data*) and then choose the *Field Customizing* option. The *Display HR master data* field (that is, the menu option) should be assigned to the **Z_HR306** field selection.

Screen area	Field selection
MEN (Menu functions)	*Z_HR306*

Assign field selections for the individual screen areas in the profile

To assign the field selections for the individual screen areas to the profile, choose the *Create Profiles and Assign Field Selections* activity in the IMG.

Select the **Z_##_TIME_AD** profile (## = group number) from the view and then choose the *Assign Field Selection* option in the *Dialog Structure*.

In the subsequent *Determine Work Area: Entry* dialog box, the selected profile is displayed as the default value.

Place your cursor on the field for the screen area and choose the possible entries help option (F4) to see a list of the possible values for the screen areas.

Choose a screen area (such as **TSK** for task selection) and then choose *Enter*. Assign the corresponding field selection (such as **TDE** for the *Maintain Time Data* task) to the screen area.

Assign the following field selections to the individual screen areas in the profile:

Screen area	Field selection
TSK (task selection)	*TDE*
VTD (Views for the *Maintain Time Data* task)	*ALL*
MEN (Menu functions)	**Z_HR306** (for the *Maintain Time Data* task)

Note:

The assignment of field selections in the *MEN* screen area for menu functions is task-specific. You assign the field selection **Z_HR306** to the *Maintain Time Data* task for the *MEN* screen area.

6. **Modify the *Time Data* screen area**

Continued on next page

Modify the *Multi-Day View for Time Data* as follows:

Define a field selection for the time data table in the Multi-Day View

Define the field selection **MD_##** (## = your group number) for the *Multi-Day View* of the time data table. Display the following fields:

Show/hide button

Weekday ID

Current date

More time data exists

Time data ID type

Time data ID text

Start time

End time

Duration of time data record in hours

Cost center

Specify the appearance of the calendar

Define a separate annual view, **##YEAR**, by copying the **306YEAR** annual view. You want the new annual view to contain the following additional information

Time data with clock times

This enables you to view partial-day records as well (such as Georg Kant's (30699401) doctor's appointment in January 2002). To be able to do so, you have to assign the setting to your profile, as described in 6-4.

Select tabs for the *Multi-Day View*

When users access the TMW using the profile you defined, you only want the *Time Data* tab, not the *Time Events* tab, to appear in the *Multi-Day View*.

Check whether a suitable field selection is already available.

Profile Assignment

Assign the field selection **MD_##** (## = your group number) you defined in 6-1 for time data in the *Multi-Day View*, the Customizing settings for the appearance **##YEAR** from 6-2, and the tab selection you checked in 6-3 for the *Multi-Day View* to your profile.

Check the degree of detail assigned to your profile. What does the degree of detail determine?

a) **Define a field selection for the time data table in the Multi-Day View**

Continued on next page

In the IMG, choose *Personnel Time Management → Time Manager's Workplace → Screen Areas → Time Data Maintenance → Multi-Day View → Define Table for Time Data*.

Choose the *New entries* option, or choose *Edit → New entries*.

Enter **MD_##** (## = your group number) as the field selection and give it an appropriate name.

In the *No. of fixed columns* field, enter the number of columns that you want users to see each time. SAP recommends using five fixed columns.

Save your entries.

Select the field selection you created. To assign fields to it, choose *Field Customizing*.

Choose the *Select fields* button. To assign fields to your field section, select the following fields from the left area of the screen:

To transfer the selected fields, choose the right arrow button (the top button in the dialog box). The fields are now included in the *Selected Fields* screen area. You can change the position of fields on the screen by selecting the field and then choosing the up or down arrows. The sequence in which the fields are sorted here determines how they are displayed later in the *Multi-Day View*.

- Show/hide button
- Weekday ID
- Current date
- More time data exists
- Time data ID type
- Time data ID text
- Start time
- End time
- Duration of time data record in hours
- Cost Center

Confirm your entries by choosing *Enter*. Copy the default display lengths for your fields. Check whether the fields allowed for data entry are also indicated as "ready for input."

Save your entries.

Specify the appearance of the calendar

Continued on next page

In the IMG, choose *Personnel Time Management → Time Manager's Workplace → Screen Areas → Time Data Maintenance → Multi-Day View → Calendar Views → Define Appearance of Calendar*.

Copy the **306YEAR** entry and name it **##YEAR**.

Select the field selection you created. To assign fields to it, choose *Field Customizing*.

Choose the *Select fields* button.

Add the Time Entry with Clock Times fields to the existing fields.

Save your entries.

This enables you to view partial-day records as well. (such as Georg Kant's (30699401) doctor's appointment in January 2002). To be able to do so, you have to assign the setting to your profile, as described in the Profile Assignment section below.

Select tabs for the *Multi-Day View*

In the IMG, choose *Personnel Time Management → Time Manager's Workplace → Screen Areas → Time Data Maintenance → Multi-Day View → Add Tabs in Time Data Maintenance Screen Area*.

Choose the *Add Tabs in Time Data Maintenance Screen Area* step.

In the next view, select the *TDE_ONL* field selection and then double-click on the *Field Customizing* option from the *Dialog Structure*. Only the *Time data* field (that is, the tab) is assigned to this field selection.

Profile Assignment

In the IMG, choose *Personnel Time Management → Time Manager's Workplace → Screen Areas → Time Data Maintenance → Assign Field Selections to Profiles*.

Select the **Z_##_TIME_AD** profile (## = group number) from the view and then choose the *Assign Multi-Day View* option in the *Dialog Structure*.

In the *Determine Work Area: Entry* dialog box, your profile is displayed as the default value.

- **Assigning Field Selection for Time Data Table in Multi-Day View**

  Enter **TN1** as the screen area and then choose *Enter*.

  Assign the **MD_##** field selection (## = your group number) you created in the following screen.

Continued on next page

Save your entries and return by choosing the green arrow.

- **Assigning the Appearance of Calendar Field Selection**

  Select again the **Z_##_TIME_AD** profile (## = group number) from the view and then choose the *Assign Multi-Day View* option in the *Dialog Structure*.

  Enter **CAL** as the screen area and then choose *Enter*.

  Assign the **##YEAR** field selection in the following screen under the annual calendar.

  Save your entries.

- **Assigning Field Selection for Tab Strips in Multi-Day View**

  Select again the **Z_##_TIME_AD** profile (## = group number) from the view and then choose the *Assign Multi-Day View* option in the *Dialog Structure*.

  Enter **VN1** as the screen area and then choose *Enter*.

  Assign field selection **TDE_ONL** in the following screen. Before doing so, delete **ALL**ALL

  Save your entries.

- **Checking the Assigned Level of Detail**

  Double-click on the *Assign degree of detail* option from the Dialog Structure:

  The field selection **COLLAP** (*Hide all in initial screen*) is assigned to the *Maintain Time Data* task. This means that only the information included in the dominant for the day is displayed when the *Multi-Day View* and the *Multi-Person View* are first accessed. Any additional time data for that day is collapsed initially.

7. **Specify details for the time data**

   You only want information on the absence times and technical information for absence type **LE##** to appear in the Details screen area.

   Define the field selection **2001_##** (## = your group number) for the *Absences* infotype (2001) which is to include the following tabs:

   Absence times

   Technical information

   All of the fields are to be included on the selected tabs. In other words, you do not need to hide fields explicitly.

Continued on next page

Assign the tab selections defined under 6-1 to the absence type **LE##** (## = group number) in your profile.

Use the personnel subarea grouping **01**.

a) **Create a field selection for the *Absences* infotype (2001)**

In the IMG, choose *Personnel Time Management → Time Manager's Workplace → Screen Areas → Details for Time Data → Specify Detail Screens for Absences Infotype (2001)*.

Choose the *Select Tabs* activity.

To create a new field selection, choose *New entries* or *Edit → New entries*.

Enter **2001_##** (## = your group number) as the field selection in the following view and then enter a text for it. Save your entries.

Select the **2001_##** field selection you just created and then double-click on the *Field Customizing* option from the *Dialog Structure*.

Choose the *Select fields* button.

In the *Field selection* dialog box, select the following fields from the *Selection fields* section on the left side of the screen:

- Absence times
- Technical info

Then choose the right arrow (the top button). The selected fields are now in the *Selected Fields* screen area. You can change the position of fields on the screen by selecting the field and then choosing the up or down arrows. The sequence in which the tabs are sorted here determines how they are displayed later in the *Details* area for the absences to which this tab selection is assigned in the profile. Confirm your entries by choosing *Enter* then save. Return to the IMG by choosing the green arrow.

Assigning tab selection in profile for absence type LE##

In the IMG, choose *Personnel Time Management → Time Manager's Workplace → Screen Areas → Details for Time Data → Assign Field Selections to Profiles*.

Select profile **Z_##_TIME_AD** (## = your group number) and then double-click on the *Assign field selection* option in the *Dialog Structure*.

In the dialog box, check that your profile appears, and then enter **C01** (*Details: Tabs for Absences Infotype (2001)*) as the screen area.

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To assign the field selection you created for the tabs in the *Details* area to your absence type **LE##** (## = your group number), choose *New entries* or *Goto → New entries*.

Choose **01,LE##** (## = your group number) as the layout ID and then assign your tab selection **2001_##** to it.

Save your entries and return by choosing the green arrow.

To check the field selection for the fields to be displayed in the tabs for the *Details* area, select your profile **Z_##_TIME_AD** (## = your group number) from the *Define Profile: Overview* screen and then double-click on the *Field Customizing* option in the *Dialog Structure*.

Enter **D01** as the screen area and then choose *Enter*.

In the following screen, check which field selection is assigned to the *All remaining absences* layout ID. The field selection **2001_A** (*Absences with payroll information*) should be assigned. All fields are assigned in this field selection. In other words, all fields for the selected tabs are available.

8. **Check your settings for the TMW**

   Access the TMW again and check the following settings:

   Initial period

   Tasks, views, and menu functions

   Tabs and fields for the *Time Data* screen area in the *Multi-Day View*

   Tabs for the absence type LE## (## = your group number) in the *Details* screen area:

   Enter a one-day absence **LE##** for one of your employees using the time data ID **L##** (## = your group number) in the TMW. Check which tabs are available for this absence type in the *Details* screen area.

   Note: If you have not completed the optional exercise on employee selection, then add your employees (**306991##** and **306992##**) temporarily to your employee list.

   Available employee lists

   a) **Accessing the Time Manager's Workplace**

      To access the *Time Manager's Workplace*, choose *Human Resources → Time Management → Administration → Time Manager's Workplace*.

      Check initial period

Continued on next page

When you call the TMW, a period of four weeks should be selected in the *Calendar* screen area (the current week, the previous week, and the following two weeks).

Check tasks, views, and menu functions

- **Tasks:**

  Only the *Maintain Time Data* task should be available. In other words, the *Process Messages* task (under the *Goto* menu option) should be inactive.

- **Views:**

  The *Multi-Day View, Multi-Person View*, and the *One-Day View* should be displayed in the menu bar.

- **Menu functions:**

  Only the *Display HR master data* option should be activated in the *Environment* menu. The functions in the *Utilities* menu should all be inactive (*Start time evaluation, Display time statement form*, and *Call employee*).

Check tabs and fields for the *Time Data* screen area in the *Multi-Day View*

- Tab pages:

  Only the *Time Data* and the *Calendar* tabs should be displayed.

- **Fields:**

  Only the following fields should be displayed:

  Show/hide button

  Weekday ID

  Current date

  More time data exists

  Time data ID type

  Time data ID text

  Start time

  End time

  Duration of time data record in hours

  Cost center

Check tabs in *Details* area for absence type LE##

Continued on next page

Employee selection

In the *Employee Lists* screen area, choose the *Employee list* button and then the *Temporarily insert employee* option.

Enter the personnel number of your employee Karin Anderson **306992##** (## = your group number) and then choose *Enter*.

Repeat this step to add your second employee, **306991##**, (## = your group number) to the list.

If you completed Exercise 6, then you can also make your selection using personnel subarea **TP##** from the *Employee Lists* screen area by choosing the *Employee list* option. If you click on it, both of your employees (**306991##** and **306992##**) are displayed.

Enter a one-day leave record using time data ID L##

Double-click on one of your employees from the employee list.

Overwrite the time data ID for the planned specification (**PLAN**) for one of the selected days in the *Time Data* screen area with the time data ID **L##** (## = your group number). Select the entry and choose the *Details* button (below left in the *Time Data* screen area): The *Absence Times* and *Technical Information* tabs should be displayed for the absence type **LE##**.

Save your entries.

Check employee selection (optional exercise)

In the *Employee Lists* area, choose the *Employee List* button to view the selection using your personnel subarea **TP##**. If you click on it, both of your employees (**306991##** and **306992##**) are displayed.

9. **Additional Exercises: Using the TMW Calendar Views**

Optional Exercises for the TMW Calendar Views

Use the TMW calendar views to display time data in tasks 9-1 and 9-2, and to maintain time data in task 9-3.

(Please display, but do not maintain any data for Georg Kant, since all course participants have to access this personnel number.)

Which work schedule is assigned to Georg Kant (30699401) in January 2002? (Use the calendar views, for example, the annual calendar.)

When did Georg Kant (30699401) have a doctor's appointment in January 2002? (Use the monthly calendar and the daily calendar.)

Maintain time data using the calendar views:

Continued on next page

Your employee Jane Miller (306993##, insert temporarily) had a doctor's appointment from 4 p.m. through 4:30 p.m. every Friday in the last month. Maintain this data using the copy and paste functions.

Your employee Jane Miller (**306993##**, insert temporarily) would like to take a week of leave next month. Enter the leave using the monthly or weekly calendar and the time data ID "L."

a) **Optional Exercises for the TMW Calendar Views**

Use the TMW calendar views to display time data in tasks 9-1 and 9-2, and to maintain time data in task 9-3.

(Please display, but do not maintain any data for Georg Kant, since all course participants have to access this personnel number.)

Which work schedule is assigned to Georg Kant (30699401) in January 2002? (Use the calendar views, for example, the annual calendar.)

In the calendar in the upper left screen area, select January 2002.

Go to the *Calendar* tab page and choose the monthly or annual calendar.

You will see that the employee was assigned a different work schedule for this month. In the months before and after January, he has his regular work schedule.

When did Georg Kant (30699401) have a doctor's appointment in January 2002? (Use the monthly calendar and the daily calendar.)

In the calendar in the upper left screen area, select January 2002.

Go to the Calendar tab page and choose the monthly calendar.

The doctor's appointment is displayed in color. Click on the day to select it, and go to the weekly or daily calendar to view the partial-day information.

Maintain time data using the calendar views:

Your employee Jane Miller (306993##, insert temporarily) had a doctor's appointment from 4 p.m. through 4:30 p.m. every Friday in the last month. Maintain this data using the copy and paste functions.

Go to the Calendar tab page and choose the monthly calendar.

Drag the DOC time data ID from the ID bar to the first Friday of the month.

The entry is displayed in red, since only partial-day records are permitted and the times have not been entered.

Double-click on the entry to open the detail area.

In the Start time field, enter 16:00 – 16:30 and choose Enter to confirm.

Continued on next page

You have now finished processing the record. Close the detail area by choosing the button at the top left of the area.

Copy the entry:

1. Select the entry and choose the *Copy* icon.
2. Select the next Friday and choose the *Paste* icon.
3. Repeat step 2) for all Fridays in that month.

If you paste an entry incorrectly, select it and choose the Delete icon.

Save your entries.

Your employee Jane Miller (**306993##**, insert temporarily) would like to take a week of leave next month. Enter the leave using the monthly or weekly calendar and the time data ID "L."

Select the relevant month in the calendar in the top left screen area.

Choose the monthly view in the calendar.

Select a week, and drag the time data ID "L" to the Monday of that week.

Double-click on the entry to open the detail area.

In the Date field, change the end date to Friday of this week.

Choose Enter to confirm your entries and then save your data.

909

Exercise 39: TMW Team View (Optional)

Exercise Duration: 10 Minutes

Exercise Objectives

After completing this exercise, you will be able to:

- Use the TMW and customize it to meet the requirements of time administrators in your enterprise

Business Example

A variety of tasks are performed by time administrators in your company. By using different profiles, you can set up the TMW to meet the requirements of each task administrator. You carry out the required Customizing steps and create suitable time data IDs and profiles for the time administrators at CAB.

System Data

System: [Tell the participants the system in which they are to carry out this exercise – T10, for example.]
Client: [Tell them which client of the system they are to use.]
User ID: [Specify the user ID for this exercise. The standard format for a user ID is the course number followed by the group number, for example, AC010-##.]
Password: [Specify the password to be used for the exercise.] The standard initial password is INIT.]

CATT: [If a CATT is required, enter the name of it. If not, delete this.]
Set up instructions:

1. [Enter all information required in the exercise.]

Task:

Maintain time data using the team view

Hint: If you have not completed the optional exercise on employee selection, insert your employees (306991## and 306992##) temporarily to your employee list. (Please maintain data for your own employees only, since other course participants require access to the other employees.)

1. Your employees are assigned the work schedule "N" for the current week. How does the weekly planned working time change?

Continued on next page

2. One of these two employees was off sick in the previous week. Record this in the system and take note of the *Employee Is Ill* totals line.

Solution 39: TMW Team View (Optional)

Task:

Maintain time data using the team view

Hint: If you have not completed the optional exercise on employee selection, insert your employees (306991## and 306992##) temporarily to your employee list. (Please maintain data for your own employees only, since other course participants require access to the other employees.)

1. Your employees are assigned the work schedule "N" for the current week. How does the weekly planned working time change?

   a) Choose the team view in the TMW. In your employee list, select all of the employees that you want to display in the team view and copy them to the calendar area. Choose the *Temporarily Insert Employees* button to add your employees, 306991## and 306992##. In the upper left, choose the current week as the processing period.

      Check your employees' weekly planned working time in the information column on the left. Hold down the CTRL button on your keyboard and use the mouse to click on Monday through Friday for the two employees you inserted temporarily. Then double-click the time data ID "N." It is then transferred to the selected days. You can see the change in the weekly planned working time column. Save your data.

2. One of these two employees was off sick in the previous week. Record this in the system and take note of the *Employee Is Ill* totals line.

   a) Select the previous week in the calendar on the upper left. Check the *Employee Is Ill* totals line at the bottom of the calendar area to see how many employees are ill in that week.

      Hold down the CTRL button on your keyboard and use the mouse to click on Monday through Friday for your two employees. Then double-click the time data ID for illness. You should see the change in the *Employee Is Ill* totals line. Save your data.

Lesson Summary

You should now be able to:

- Customize the TMW to include the tasks and functions of the time administrators in your enterprise

Unit Summary

You should now be able to:

- Explain the functions of the Time Manager's Workplace
- Customize the TMW to include the tasks and functions of the time administrators in your enterprise

Test Your Knowledge

913

1. The Time Manager's Workplace contains the following screen areas:

   Choose the correct answer(s).

   □ A Calendar
   □ B Details
   □ C Employee List
   □ D Info Area
   □ E Time Data Recording

2. All the screen areas of the Time Manager's Workplace except the Messages area can be customized.

   Determine whether this statement is true or false.

   □ True
   □ False

914

Answers

1. The Time Manager's Workplace contains the following screen areas:

   Answer: A, B, C, D, E

   In addition to all of the above, the Time Manager's Workplace also contains a *Messages* screen area.

2. All the screen areas of the Time Manager's Workplace except the Messages area can be customized.

   Answer: True

   Customizing for the Time Manager's Workplace provides many options for adjusting the layout to suit your requirements.

Unit 31

915

Cost Assignment and Activity Allocation

For more information, see the Instructor Guide in SAPNet.

Unit Overview

This unit describes the options for entering information about cost assignments and activity allocations and how to set them up and activate them.

Unit Objectives

After completing this unit, you will be able to:

- Set up and activate cost assignment and activity allocation for time infotypes

Unit Contents

Lesson: Cost Assignment and Activity Allocation

916

Lesson Duration: 30 Minutes

Lesson Overview

Activating and adjusting cost assignment and activity allocation data

Lesson Objectives

After completing this lesson, you will be able to:

- Set up and activate cost assignment and activity allocation for time infotypes

For more information, see the Instructor Guide in SAPNet.

Business Example

- Actual personnel costs are posted to the assigned cost center after the payroll results are transferred (cost assignment).
- In your company, activities and tasks that are stored as times are allocated internally between two cost centers (activity allocation).

Integration with Accounting

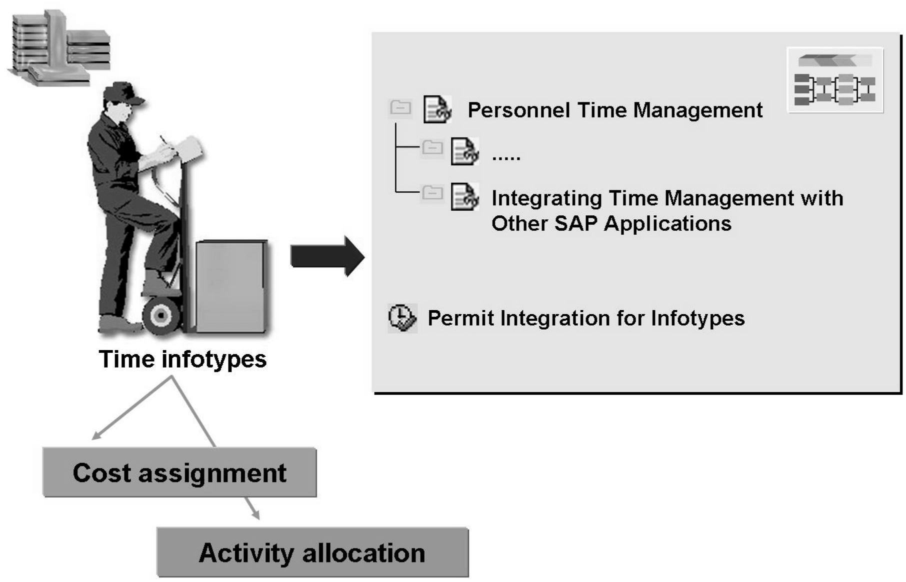


Figure 521: Integration of Infotypes

In the Implementation Guide (IMG), you can specify which infotypes are permitted for integration with other areas.

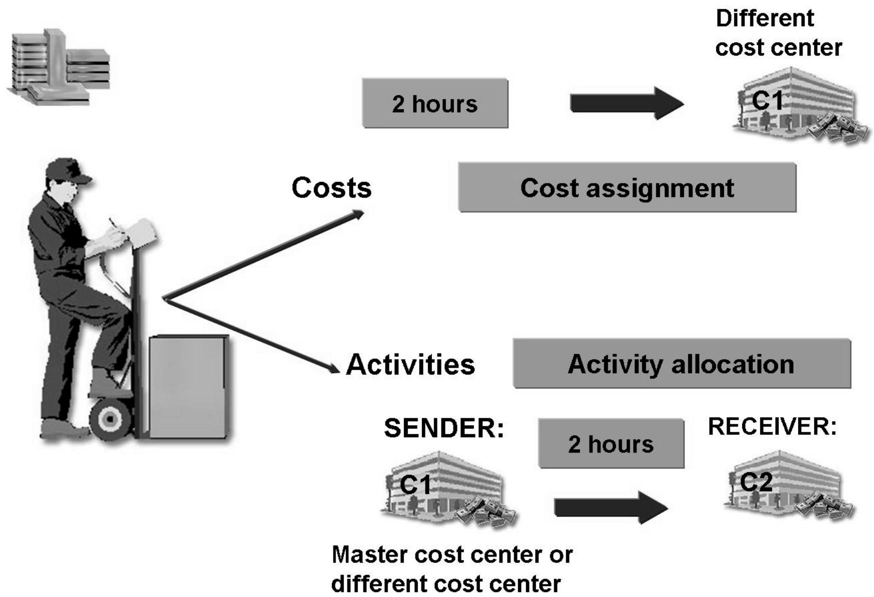


Figure 522: Interaction with Accounting

In Time Management, you can enter specifications for activity allocation (secondary cost allocation) and for cost assignment (primary cost allocation) along with employee time data. These options are available for certain time infotypes.

Activities performed in an enterprise can be allocated internally. Activities to be allocated internally often include employee time data when employees work for another department. If these times (activities) are to be allocated between cost centers, you enter a receiver cost center and an activity type for valuating the activity performed. The activity type allows you to valuate the activity with a price (rate) in Controlling. The sender cost center (usually the employee's master cost center) is credited and the receiver cost center is debited.

Sometimes the sender cost center must be changed. Sometimes the sender cost center must be changed if an employee works for a different department and these activities need to be reassigned to a receiver cost center.

The actual personnel costs are debited from the employee's master cost center after the payroll results are transferred. In some cases, the costs (primary costs) must be reposted to a cost center that is different from the master cost center. You can specify this. In this case, the monetary amounts derived from the infotypes (primary costs) are debited from the cost center specified in the infotype.

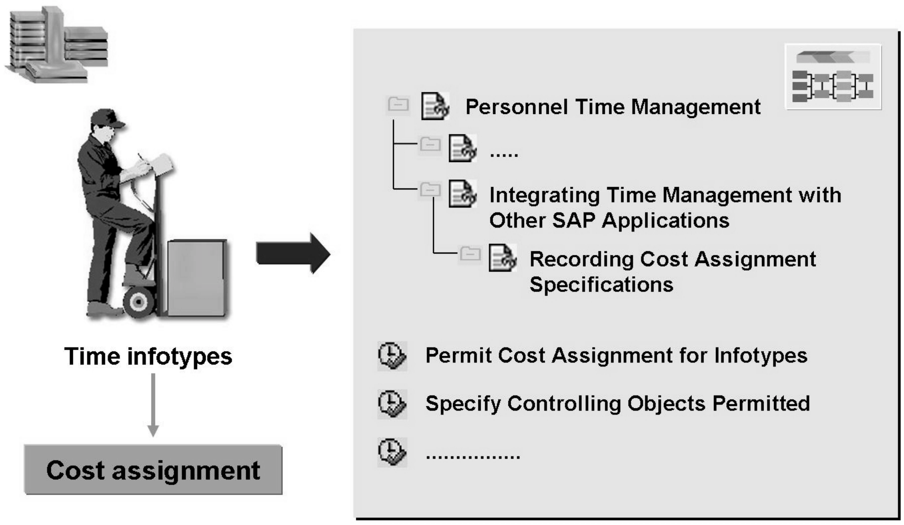


Figure 523: Activating Cost Assignment for Infotypes

In the IMG, you can specify for which infotypes you want to enter cost assignment specifications.

The system reads these specifications to assign the monetary amounts derived from the infotypes to the applicable Controlling objects as primary costs.

The Controlling objects are debited when the payroll results are transferred.

You can link specifications for activity allocation to the following infotypes:

Absences (2001), Attendances (2002), Substitutions (2003), Availability (2004), Overtime (2005), Employee Remuneration Info (2010), and *Time Events (2011)*.

Infotype	Infotype Text	Cost Assignment
2001	Absences	✓
2002	Attendances	✓
2003	Substitutions	✓
2004	Availability	✓
2005	Overtime	✓
2010	EE Remun. Info	✓
2011	Time Events	✓

✓ Cost assignment activated in relevant infotype

Figure 524: Activating Cost Assignment

In the IMG, you can decide for which infotypes you want to activate cost assignment (primary cost allocation).

To do so, you have to activate the switch for cost assignment by selecting the checkbox in Customizing.

This is possible for the following infotypes: *Absences (2001), Attendances (2002), Substitutions (2003), Availability (2004), Overtime (2005), Employee Remuneration Info (2010)*, and *Time Events (2011)*

This setting is relevant both when you record time data using infotypes and using the Time Manager's Workplace.

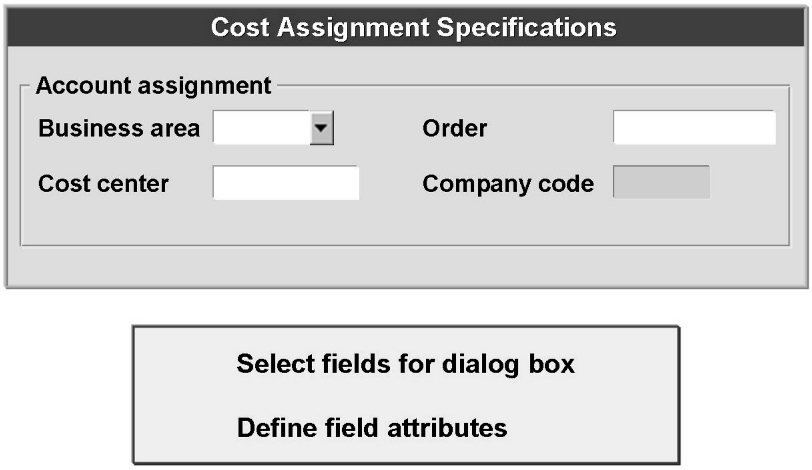


Figure 525: Dialog Box for Cost Assignment

The following Customizing setting is only applicable when you record times by maintaining infotypes. It determines how the dialog box for cost assignment is to be structured for the relevant infotypes.

You can specify which Controlling objects are permitted when recording cost assignment specifications. The selected objects then appear in the cost assignment dialog box in the applicable infotypes. In addition, you can set attributes for the object fields, for example, if you want any of the fields to be mandatory.

You can also set up the dialog box in other ways.

You might want to include different fields in the account assignment section of the screen for salaried employees than for hourly-wage earners. You can control this using the **COBLT** feature.

This Customizing setting does not apply if you maintain time data using the Time Manager's Workplace. In the TMW, the field selections for time data or detail information determine which fields (for account assignment specifications, for example) are available.

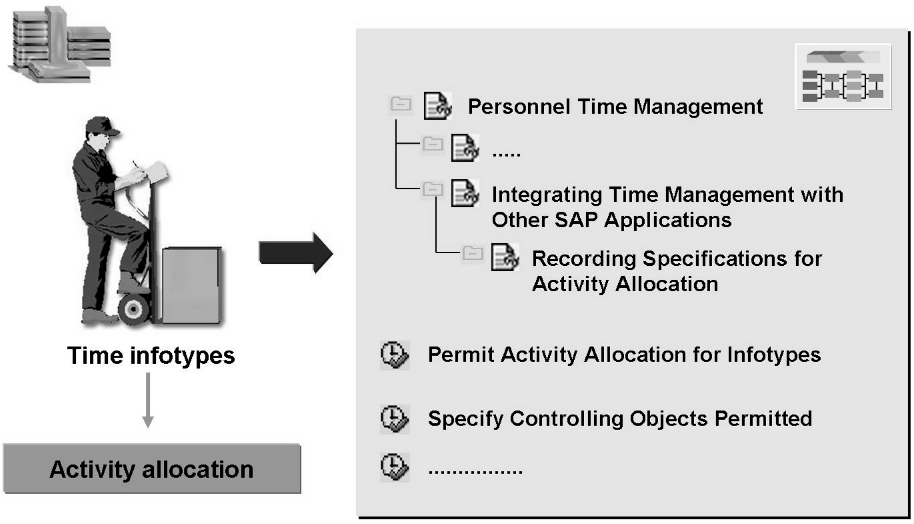


Figure 526: Activate Activity Allocation for Infotypes

In the Implementation Guide (IMG), you can specify for which infotypes you want to enter specifications for activity allocation.

You can link the following infotypes to specifications for activity allocation:

***Absences* (2001)**

***Attendances* (2002)**

Employee Remuneration Information (2010)

To use employee remuneration information for activity allocation, times must be recorded as a number of hours. If you only use employee remuneration info with amounts, then cost assignment is sufficient.

You can use the **RPTPDOC0** report to transfer these activity allocation specifications to Controlling and carry out an activity allocation (secondary cost allocation). In distributed systems, this transfer occurs asynchronously using ALE.

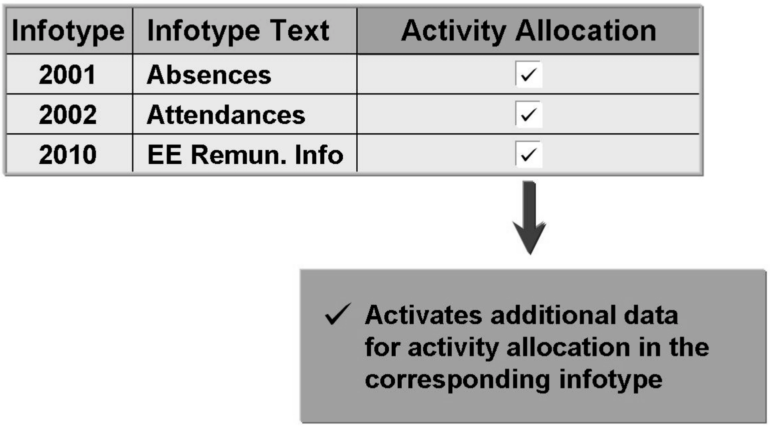


Figure 527: Activating Activity Allocation

In the IMG, you can decide for which infotypes you want to activate activity allocation (secondary cost allocation).

To do so, you have to activate the switch for activity allocation by activating the checkbox.

This is possible for the following infotypes: *Absences (2001), Attendances (2002)*, and *Employee Remuneration Info (2010)*

This setting is relevant both when you record time data using infotypes and using the Time Manager's Workplace.

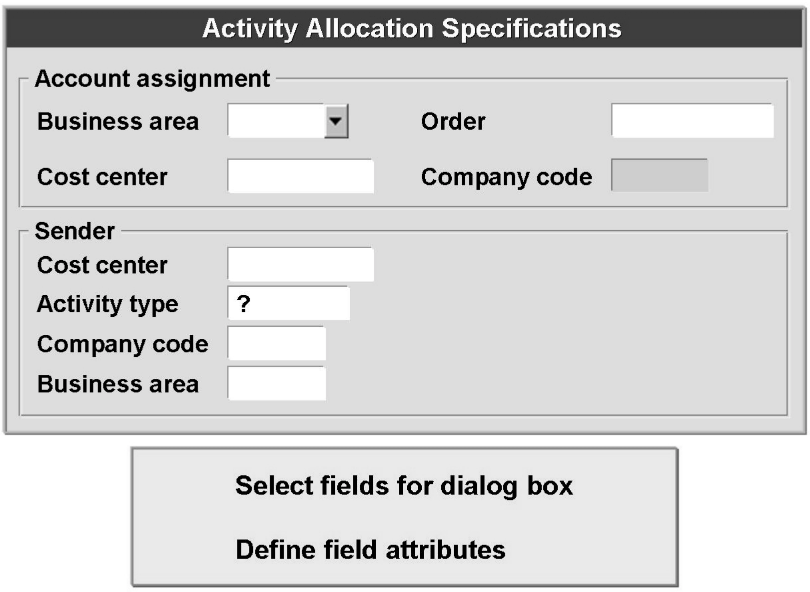


Figure 528: Dialog Box for Activity Allocation

The following Customizing setting is only applicable when you record times by maintaining infotypes. It determines how the dialog box for entering activity allocation specifications is structured for the applicable infotypes.

You can specify which fields you want to include in the dialog box for entering specifications for activity allocation. The selected objects then appear in the activity allocation dialog box in the applicable infotypes.

In the standard system, the *Company code*, *Business area*, and *Cost center* fields are used for the sender; the *Company code, Business area, Cost center*, and *Order* fields for the receiver, plus the activity type. The controlling area field is displayed but is not ready for input.

In addition, you can set attributes for the object fields, for example, if you want any of the fields to be mandatory.

You can also set up the dialog box in other ways. You might require different fields in activity allocation specifications for salaried employees than you do for hourly-wage earners, for example. You can control this using the **COBLT** feature.

This Customizing setting does not apply if you maintain time data using the Time Manager's Workplace. In the TMW, the field selections for time data or detail information determine which fields (for activity allocation specifications, for example) are available.

Facilitated Discussion

Discussion Questions

Use the following questions to engage the participants in the discussion. Feel free to use your own additional questions.

Lesson Summary

You should now be able to:

- Set up and activate cost assignment and activity allocation for time infotypes

Unit Summary

You should now be able to:

- Set up and activate cost assignment and activity allocation for time infotypes

925

Test Your Knowledge

1. Cost assignment and activity allocation are activated in all Time Management infotypes.

   Determine whether this statement is true or false.

   □ True

   □ False

926

Answers

1. Cost assignment and activity allocation are activated in all Time Management infotypes.

   Answer: False

   You can activate cost assignment as required in the *Absences (2001), Attendances (2002), Substitutions (2003), Availability (2004), Attendance Quotas (2007)*, and *Employee Remuneration Info* (2010) infotypes.

Unit 32

927

HCM Reporting Overview

For more information, see the Instructor Guide in SAPNet.

Unit Overview

At the conclusion of this unit, you will be able to describe:

- Describe HR reporting roles, the info systems, and the other reporting tools in HR
- Ascertain which requirements can be satisfied by which tool

Unit Objectives

After completing this unit, you will be able to:

- Describe the overall enterprise scenario, roles, and levels of reporting.
- Describe the reporting tools available

Unit Contents

Lesson: Essentials of Reporting

928

Lesson Duration: 30 Minutes

Lesson Overview

In this lesson, you learn the basic essentials about reporting.

Lesson Objectives

After completing this lesson, you will be able to:

- Describe the overall enterprise scenario, roles, and levels of reporting.

For more information, see the Instructor Guide in SAPNet.

Business Example

- You are an employee in the Human Resources Controlling department. You regularly require reports for senior management.
- There are a number of different reporting tools available to you for this purpose, depending on the type of reporting task in question.
- You inform yourself about how to use the different tools and select a tool on the basis of what you need it for.

Basics

- ***mySAP ERP HCM consists of***
  - **Talent Management**
  - **End-User Service Delivery**
  - **Workforce Process Management**

Figure 529: Workforce Analytics

The Role of a Human Resources Analyst

The Human Resources Analyst is an HR expert. He or she is regarded as a strategic partner of HR managers, and the managing directors of the enterprise. He or she provides information that enables HR data to be monitored with regard to the strategic goals of the enterprise. This information is used as a basis for personnel planning, and enables the enterprise to satisfy statutory reporting requirements.

The following **tasks** are typical of those performed by the Human Resources Analyst.

- Creation, execution, and formatting of numerous reports, which constitute a significant **data retrieval** tool
- Formatting and timely retrieval of relevant HR data to help HR managers and the managing directors of the enterprise to **devise plans and make decisions**
- Processing and timely retrieval of **HR statistics** required by law
- The following international **single roles** are available for the authorizations of the **human resources analyst**:
  - *Human Resources Analyst* (SAP_HR_REPORTING)
  - *Time and Labor Analyst* (SAP_HR_PT_TIME-LABOR-ANALYST)
- To depict the Human Resources Analyst composite role's **country-specific activities**, single roles are provided for the following countries:
  - *Canada:* SAP_HR_PA_CA_HR-ADMINISTRATOR
  - *USA:* SAP_HR_PA_US_HR-ADMINISTRATOR

Reporting Levels

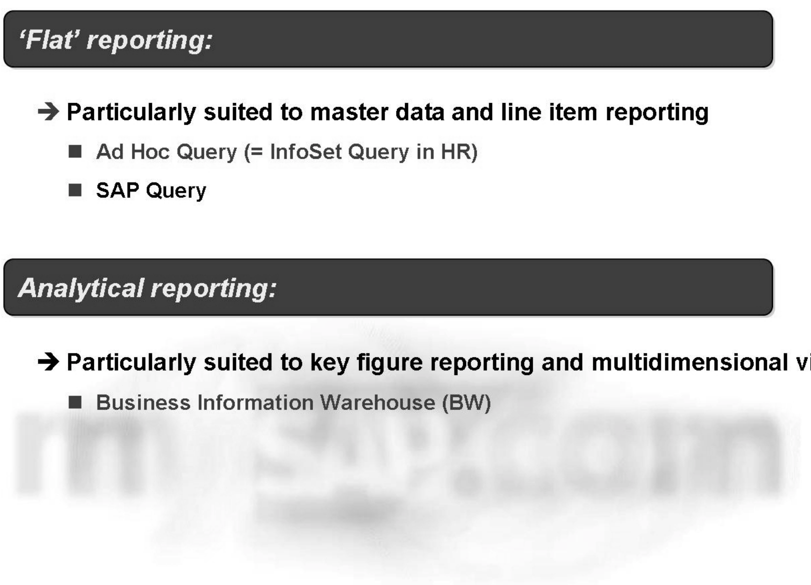


Figure 530: Reporting Levels

A distinction is made between two **levels of reporting**:

- Flat or **line item** reporting
- **Analytical** reporting

Flat reporting means reporting on uncompressed **raw** data from tables. The following reporting tools are available:

- *Ad Hoc Query (= InfoSet Query in HR)*
- *SAP Query*

Analytical reporting means using **compressed data** (key figures) as the basis for reporting.

The following reporting tool is particularly suited to this purpose:

- *Business Information Warehouse (BW)*

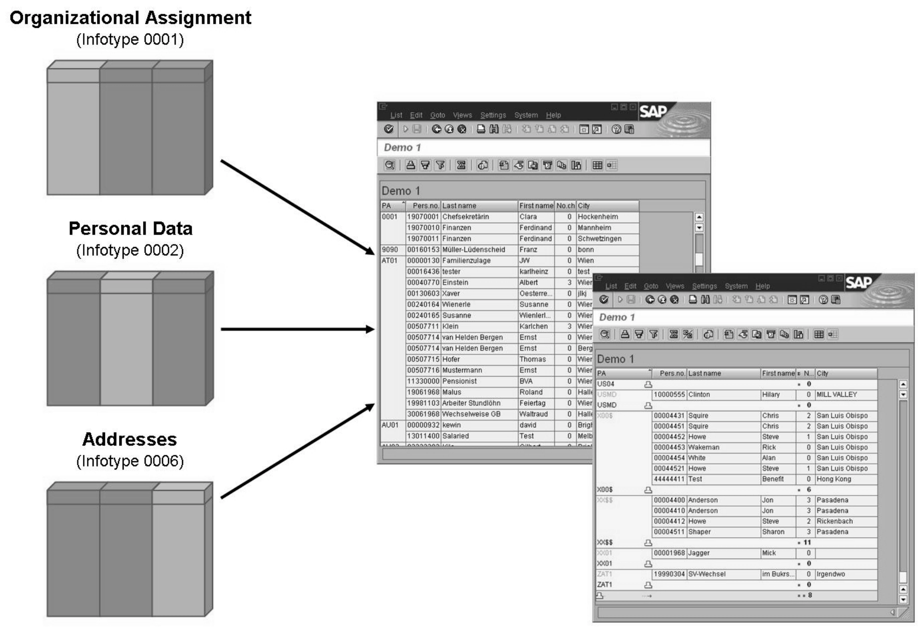


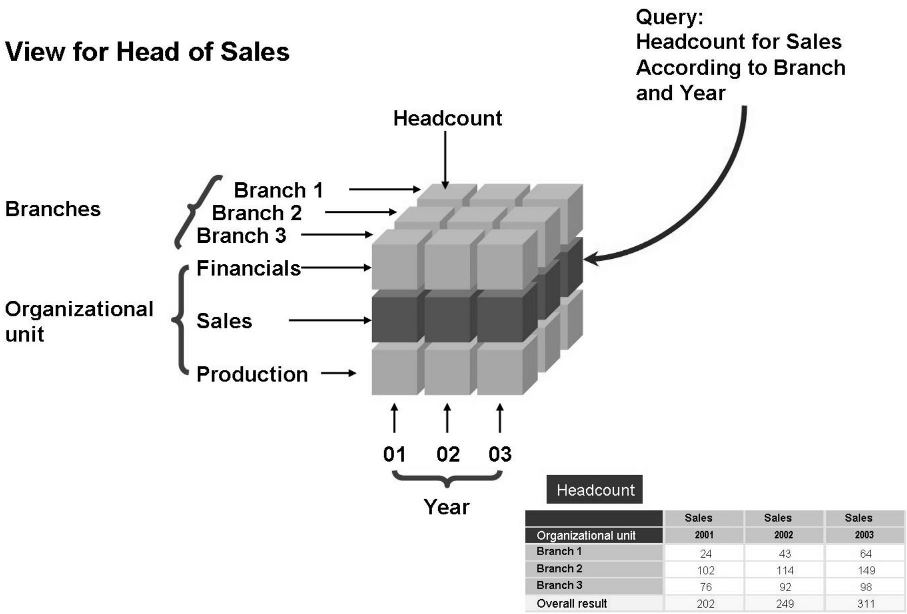
Figure 531: "Flat" reporting

When flat reporting is performed, data is retrieved from various **infotypes**.

The result is displayed in a flat list, which means that **each line of output corresponds to one database entry**.

Reports are based on **uncompressed data**.

In contrast to the Business Information Warehouse, there is **no "*slicing*" and "*dicing*"**. In other words, there are no views of different levels or segments of an InfoCube and its key figures and characteristics.



	Sales	Sales	Sales
Organizational unit	2001	2002	2003
Branch 1	24	43	64
Branch 2	102	114	149
Branch 3	76	92	98
Overall result	202	249	311

Figure 532: Query Views

When multidimensional reporting is performed using the **Business Information Warehouse**, data is prepared in a way that is particularly conducive to reporting.

Data is stored and displayed in **InfoCubes**.

InfoCubes contain:

- *Key figures* (such as headcount, leaving rate, etc.)
- *Characteristics* (such as gender, personnel area, etc.)

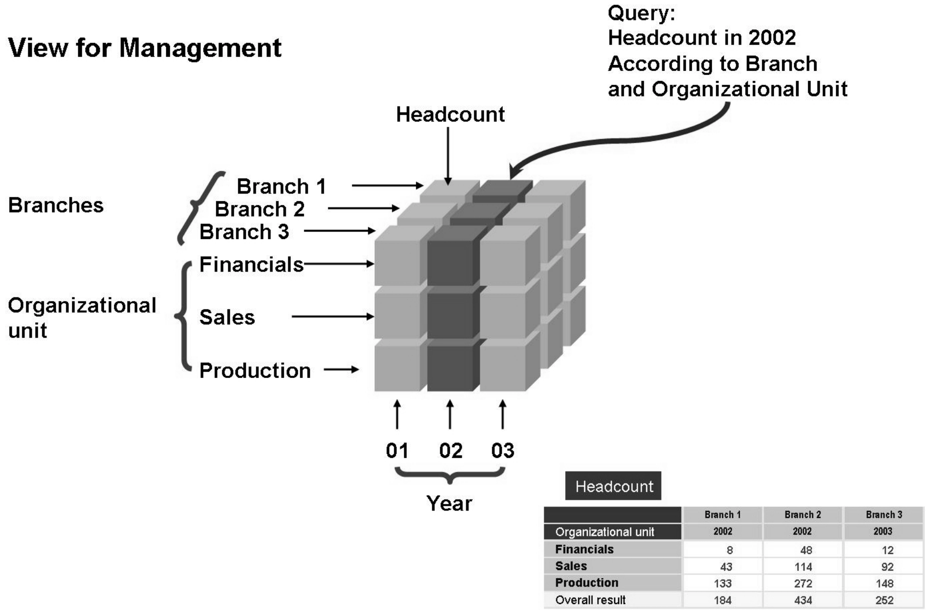
A single query (such as Headcount) can be used to create different **views** of one or more InfoCubes as required.

Example: Query *Headcount*

A single query enables you to depict the number of employees (key figure) according to different criteria (characteristics) in a variety of views, and therefore for different target groups:

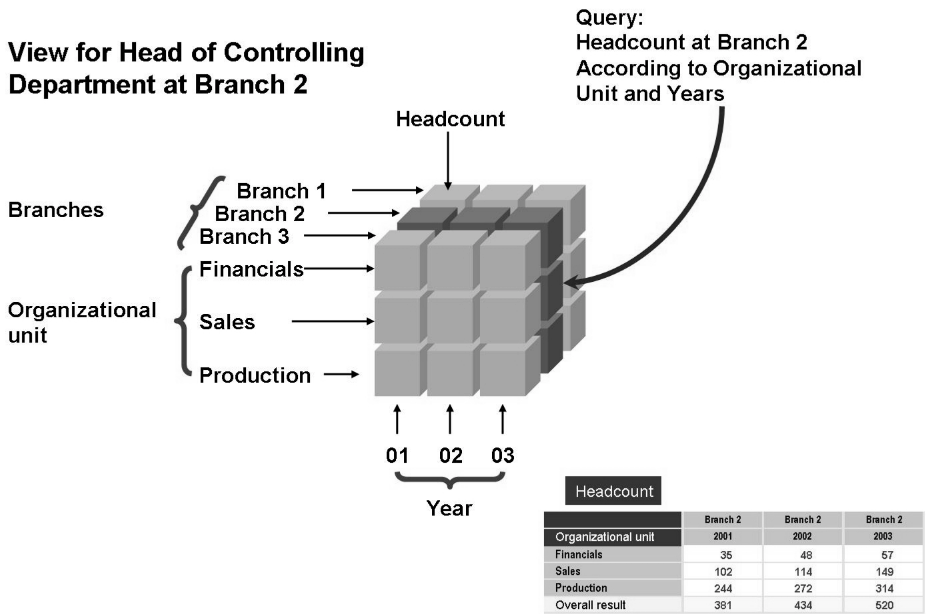
- Head of Sales: headcount of the organizational unit for Sales according to branch and year.
- Management: headcount for a particular year according to organizational unit and branch.
- Head of Controlling Department at a particular branch: headcount of a branch according to organizational unit and year.

Query navigation is a special feature of the Business Information Warehouse. Once a query has been determined, it is not “frozen”. Instead, you can use the navigation functions to create different query views. You can navigate data, create various ad-hoc data views, and drilldown to individual characteristics.



	Branch 1	Branch 2	Branch 3
Organizational unit	2002	2002	2003
Financials	8	48	12
Sales	43	114	92
Production	133	272	148
Overall result	184	434	252

Figure 533: Query Views



	Branch 2	Branch 2	Branch 2
Organizational unit	2001	2002	2003
Financials	35	48	57
Sales	102	114	149
Production	244	272	314
Overall result	381	434	520

Figure 534: Query Views - An Example

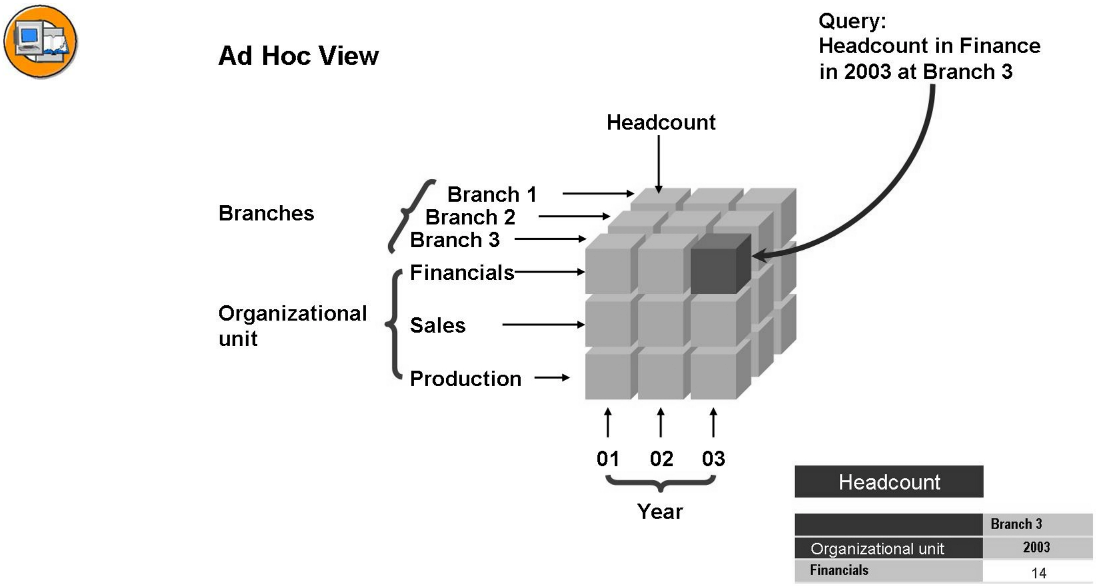


Figure 535: Query Views

Facilitated Discussion

Discussion Questions

Use the following questions to engage the participants in the discussion. Feel free to use your own additional questions.

Lesson Summary

You should now be able to:

- Describe the overall enterprise scenario, roles, and levels of reporting.

Lesson: Overview of Reporting Tools

935

Lesson Duration: 30 Minutes

Lesson Overview

In this lesson, you learn the basic facts about reporting tools.

Lesson Objectives

After completing this lesson, you will be able to:

- Describe the reporting tools available

For more information, see the Instructor Guide in SAPNet.

Business Example

You require a general overview of the reporting tools before going into them in detail in the following chapters.

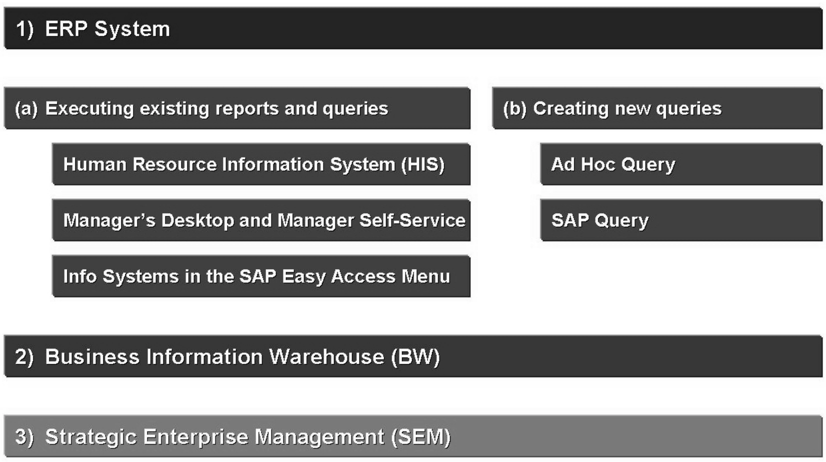


Figure 536: Overview of Reporting Tools

Depending on the **system environment** in which they are used, reporting tools are divided into two categories, namely reporting tools within

- *The ERP System* (flat reporting)
- *The Business Information Warehouse* (analytical reporting)

The tools included in the **ERP system** for **flat reporting** enable you to

- Execute existing reports and *queries*
- Create new queries and *change existing queries*

The tools used to **execute existing reports** and queries are:

- *Human Resources Information System* (HIS)
- *Manager's Desktop* and *Manager Self-Service* via the Portal
- *Information Systems* in the SAP Easy Access Menu

You can **create new** queries and **change existing** queries using:

- *Ad Hoc Query (= InfoSet Query in HR)*
- *SAP Query*

The Business Explorer is available as a front end in the **Business Information Warehouse**

You can also execute reports in the **Strategic Enterprise Management** System.

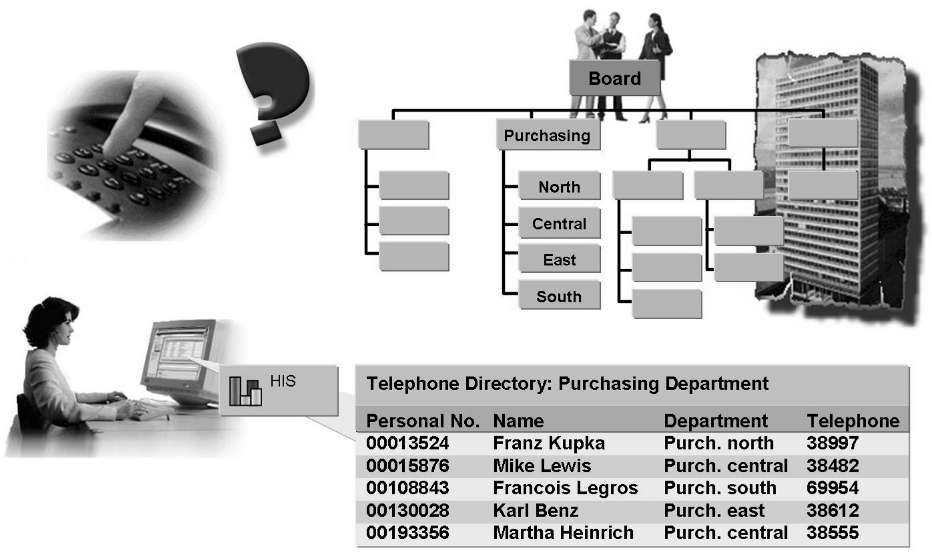


Figure 537: Human Resources Information System (HIS)

HIS makes it easy for you to **request reports using objects in a hierarchy** in the SAP System. The reports are started directly from **Structural Graphics**.

As a **prerequisite** for starting the graphics function in the Human Resources Information System, the system must contain data in a hierarchical structure. In the standard SAP System, they are

- The **organizational structure** and
- The **business event hierarchy**

Procedure:

On the initial Structural Graphics screen, select the objects you want to report on. The reports that are available for the selected object are listed on a second screen. To access a report, double-click on it.

This procedure has the following **advantages**:

- You are *not required* to enter data in a report selection screen. The parameters set by the system are the same as the report selection parameters that are most frequently used in practice.
- You can access *reports from different HR components*, such as Personnel Administration and Recruitment, without having to switch from one application to another.

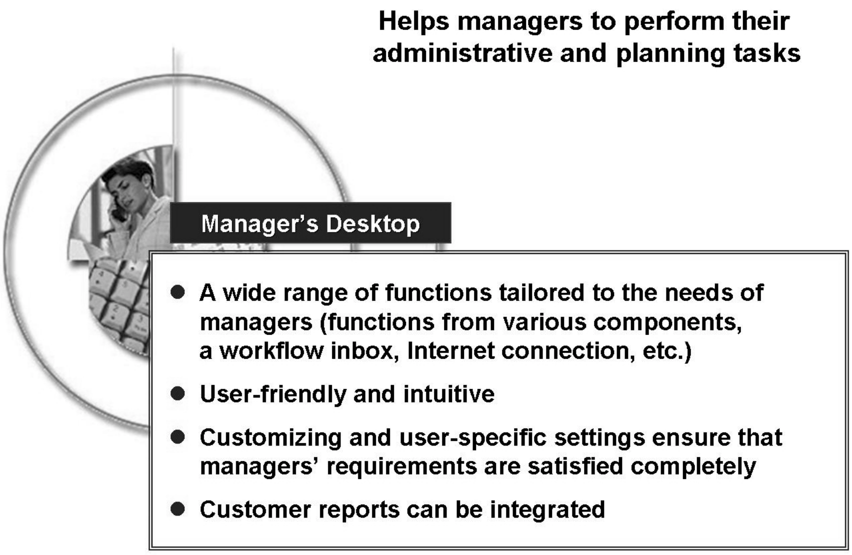


Figure 538: Manager's Desktop

Manager's Desktop is tailored to the daily needs of managers - line managers, for example - by helping them to perform their administrative, organizational, and strategic tasks.

Manager's Desktop gives managers **decision support** when making human resource decisions and when performing **strategic planning activities** by providing them with swift access to required HR data of directly and indirectly subordinate employees. It then enables them to **report** on this data.

Managers can also execute **cross-application functions**: for example, they can execute workflow tasks (work items) or start reports from Controlling. *Manager's Desktop* can be used to execute a wide range of **standard reports** from HR and Controlling, as well as customer reports. Its Web browser **integration** means that *Manager's Desktop* enables managers to display intranet and Internet pages.

"Drag&Drop" functions make it easier for users to perform tasks.

Finally, *Manager's Desktop* supports the growing trend of **decentralizing human resource tasks and responsibilities.** By transferring more and more tasks to line managers, HR departments can concentrate their efforts on key HR activities and free resources for new services.

- **Target Group**
  - **Managers with line and personnel responsibility**
  - **Suitable for any industry**
- **Roles**
  - **Team leaders**
  - **Project managers**
  - **Heads of department**
  - **...**
- **Content**
  - **Personnel Management**
  - **Budget Management**
  - **Project Management**

Figure 539: Manager Self-Service: The Portal Solution

Manager Self-Service helps managers perform their managerial tasks.

The functions are delivered in business packages.

Easy and intuitive usability are characteristic of Manager Self-Service.

Extensive Customizing options enable you to make changes without the assistance of a developer.

Prerequisites of Implementation

- Organizational Management as mandatory prerequisite of MSS
- Checklist under: www.service.sap.com/MSS

- SAP standard reports are integrated with the SAP Easy Access Menu
- In HR components, the reports for a given application are stored in the Info systems folder
- You can access lists of all HR reports from the menu by choosing

  Human Resources -> Information System -> Reports
- Reports that are frequently required can be added to your favorites

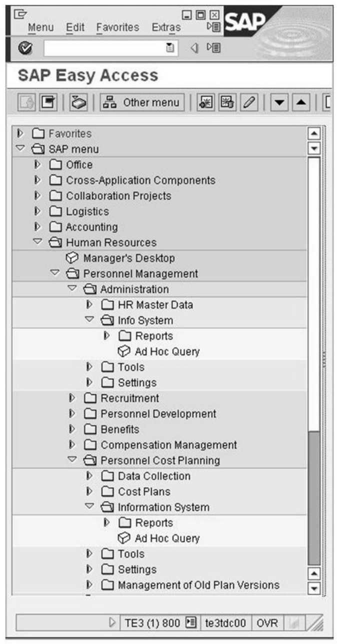


Figure 540: Info Systems in the SAP Easy Access Menu

In Release 4.6, area menus were converted to **tree navigation** (SAP Easy Access Menu). The former **report trees** are now integrated with the application as **info systems** and can be enhanced with new reports and queries.

You can search for standard reports in individual applications or across applications. Application-specific standard reports are available in the info systems of individual HR components. In the SAP Easy Access Menu, HR standard reports are also grouped together in comprehensive info systems.

You can access the info system of individual **HR components** by choosing the following:

- *Human Resources ⇒ <Component> ⇒ Information System ⇒ Reports*
- *Human Resources ⇒ Payroll ⇒ <Continent> ⇒ <Country> ⇒ Info System*
- *Human Resources ⇒ Time Management ⇒ <Component> ⇒ Info System*

HR Info System

As well as containing reporting tools, the HR Information System contains all HR-specific reports. To access the HR Information System, choose:

- *Human Resources ⇒ Information System → Reports*

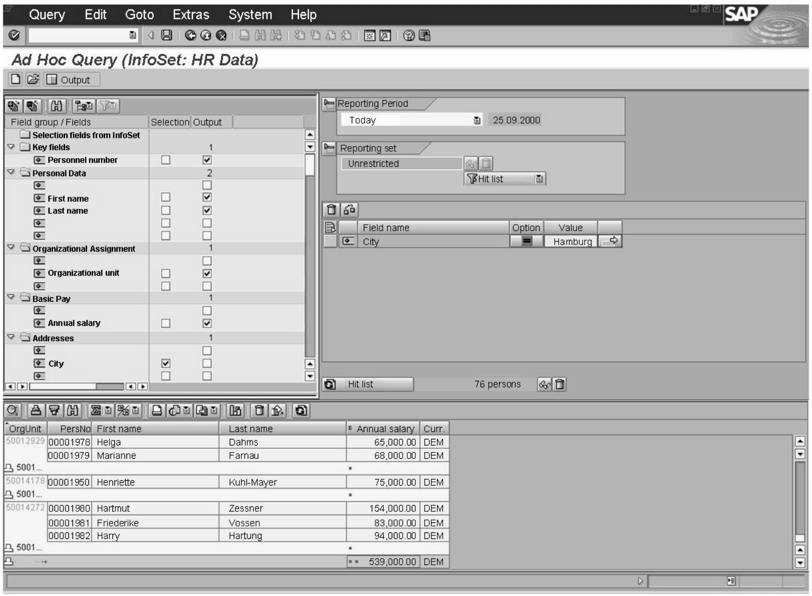


Figure 541: Ad Hoc Query

Ad Hoc Query is a **simple** and **efficient** tool for selecting and processing HR data.

Ad Hoc Query is the tool that is best suited to line item (flat) reporting.

Ad Hoc Query has the following **advantages:**

- Report definition is simple using Drag&Drop
- You can report on data from Personnel Administration, Organizational Management, Training and Event Management, Recruitment, and Personnel Development
- You can select selection and output fields as required
- There are numerous report design options
- The resulting set is displayed before output
- Real data is selected and output – it is a one-screen application
- Results are determined very quickly because the database is accessed directly
- Logs

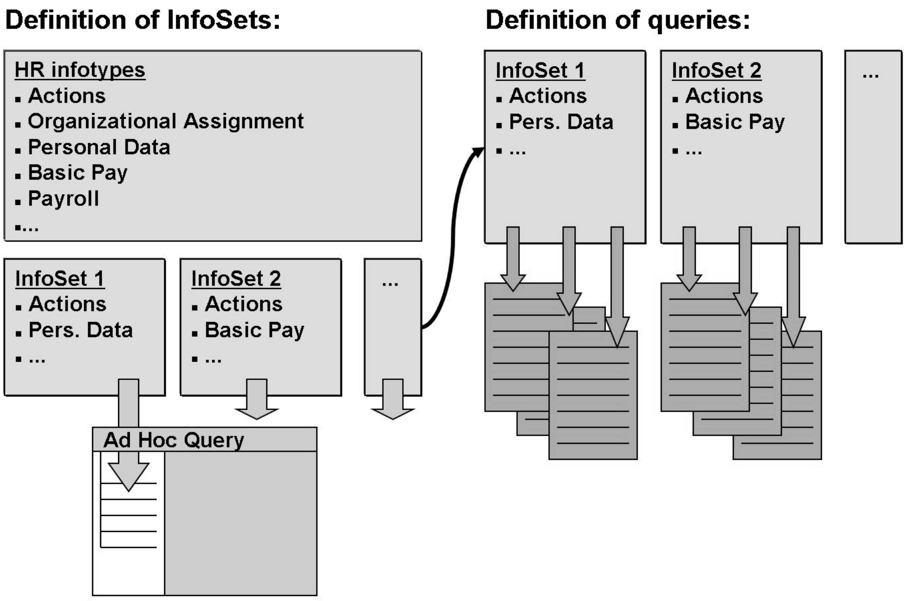


Figure 542: SAP Query

SAP Query performs the following **functions** for reporting in HR:

- **InfoSets are created**. They are the basis for defining reports using Ad Hoc Query and SAP Query.
- **Reports are defined** if they cannot be created using Ad Hoc Query (if local fields are required, for example).
- **User groups are created** and **InfoSets are assigned** to user groups.

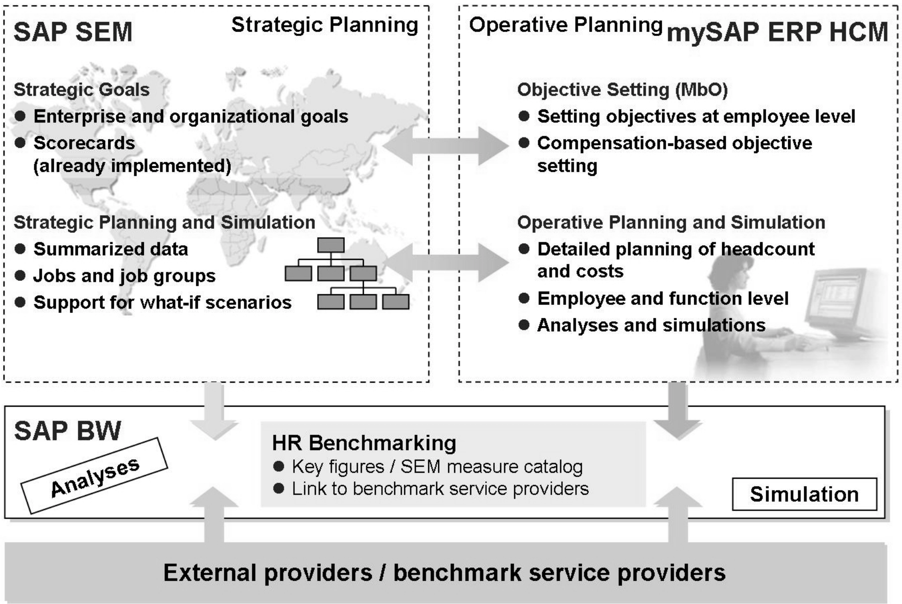


Figure 543: HR Analytics

Human Resources Analytics combines the strategic planning of mySAP SEM with the operative planning of mySAP ERP HCM to provide integrated Business Content for extensive analyses and HR benchmarking.

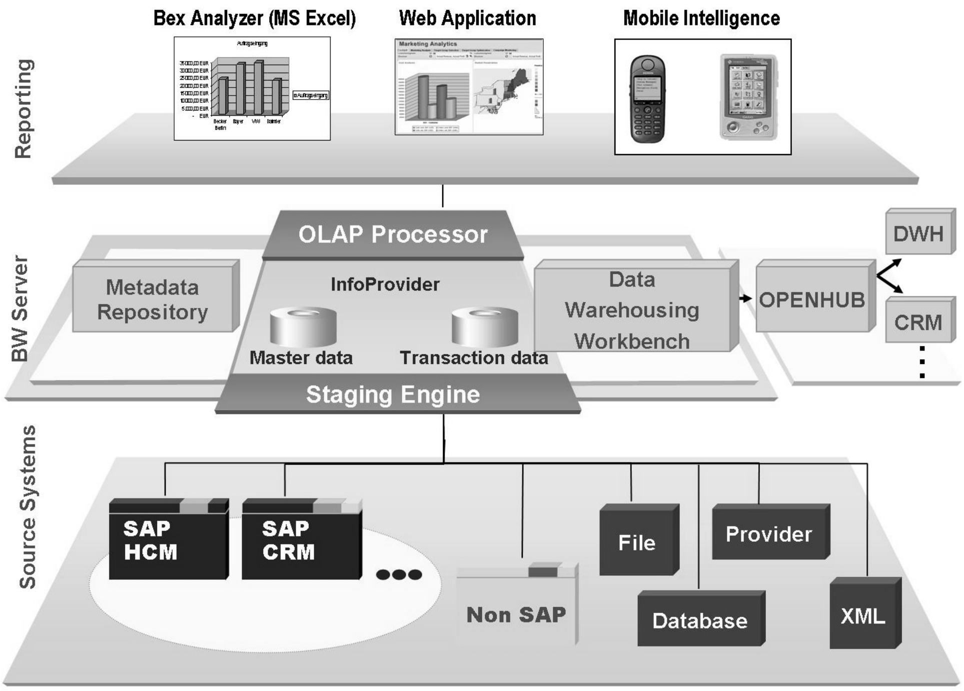


Figure 544: SAP Business Information Warehouse

The Business Information Warehouse is a tool that is used to meet analytical reporting requirements (for example, key figures and benchmarking).

The **main constituent parts** of the Business Information Warehouse are:

- The Business Information Warehouse Server
- The Data Warehousing Workbench
- The Business Explorer

Reporting can be done using data extracted from SAP systems, non-SAP systems, or from external **sources** such as databases, online services, and the Internet.

This data is managed in the **Business Information Warehouse Server.**

The **Data Warehousing Workbench** manages the various source systems.

The **Business Explorer** is used to display, analyze, and process the reports.

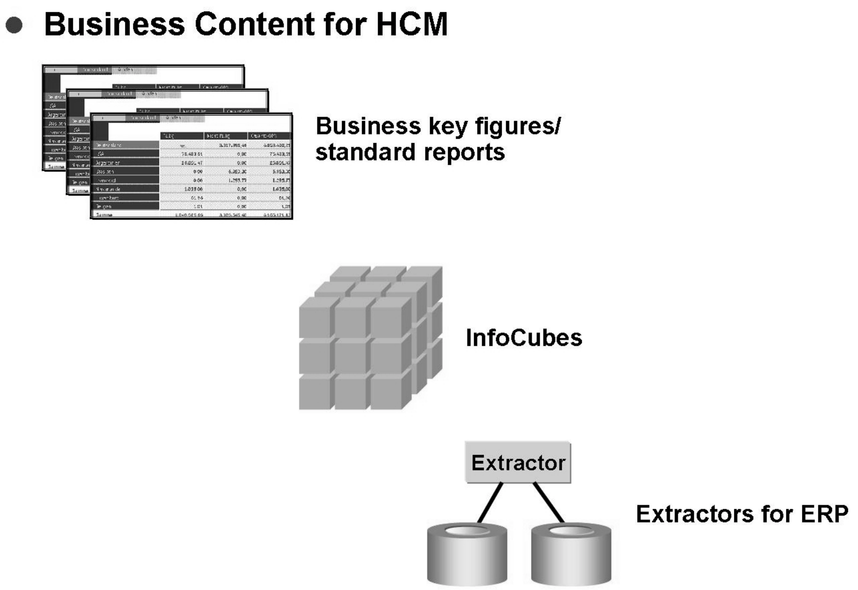


Figure 545: mySAP ERP HCM in Business Information Warehouse

Business Content makes it easier to report on, prepare, and retrieve data. Predefined standard reports and report templates enable you to create reports quickly and simply.

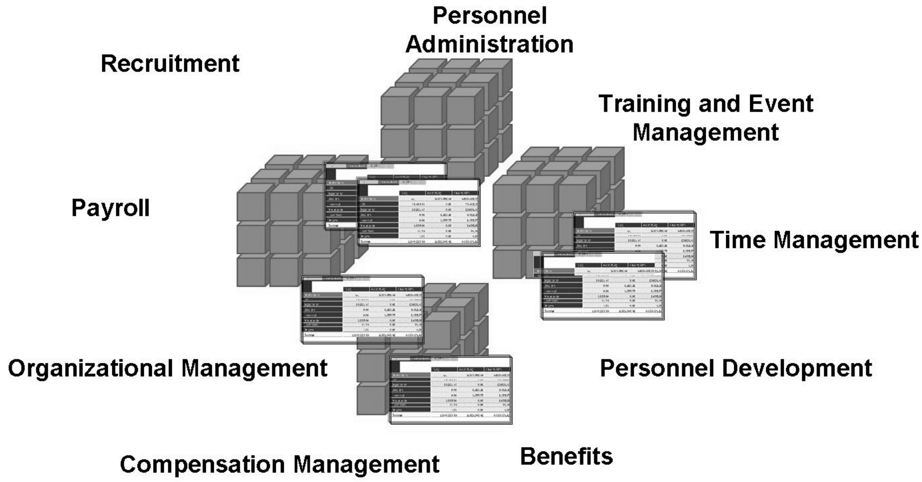


Figure 546: Business Content for HCM in BW

HCM Business Content includes

- Extractors
- HCM InfoCubes
- Queries

Business Content provides you with detailed **standard reports** and **key figures** that are used to perform analyses.

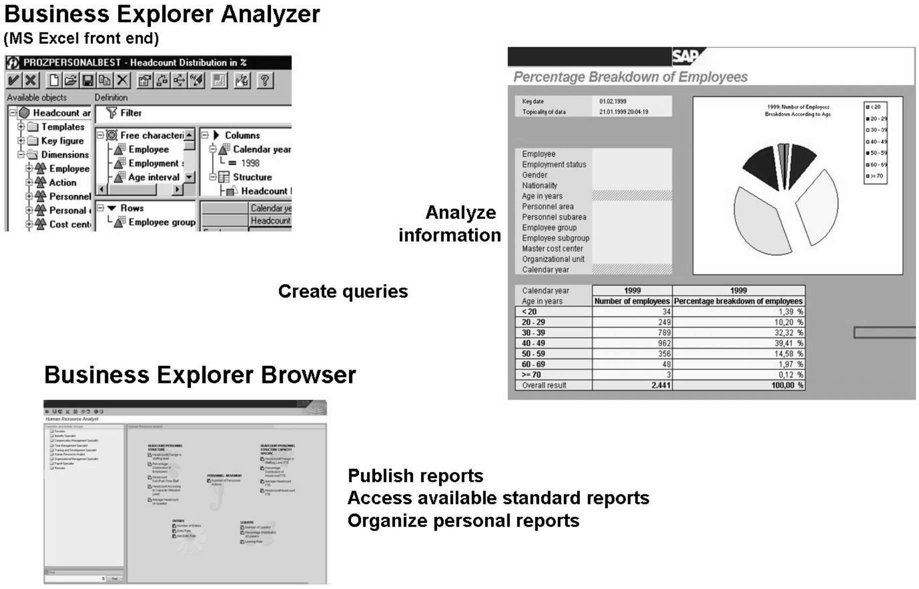


Figure 547: Business Explorer

The Business Explorer consists of two parts:

- The Report Builder in the *Business Explorer Analyzer* is used to create new queries and change existing queries. Data is displayed in MS Excel, which can be used to analyze it. All MS Excel functions are available (for example, functions that enable you to create graphics which can then be saved in the report). You can then store the graphics in the report.
- The *Business Explorer Browser* enables you to make queries available to other users in the Internet or intranet. Users can start queries simply by double-clicking on them. They can then be used to perform further analyses.

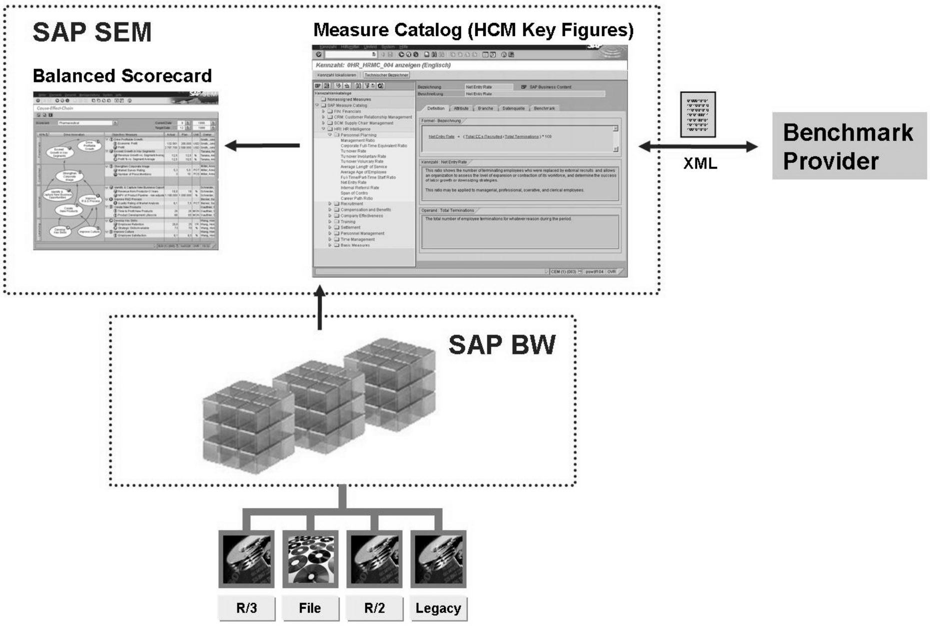


Figure 548: SAP SEM HCM Measure Catalog

Examples:

Basic key figures

- Such as headcount, FTE (full-time equivalent), number of managers, hired employees, workdays, leavers.

Personnel Planning

- Such as management quota, fluctuation rate, average length of service, net entry rate, full-time/part-time rate.

Recruitment

- Such as net hiring rate, internal hiring rate, external hiring rate.

Compensation and Benefits

- Such as average employer expense for benefits, benefits for overall compensation, percentage enrollment in benefits.

Enterprises' effectiveness

- Such as costs per employee in FTE, salary revenue, income before interest and tax (EBIT) per FTE.

Training

- Such as training investment per FTE, training hours per FTE, training investment per training hour.

Personnel management

- Such as total costs for personnel activities, personnel area costs per employee, staffing factor personnel area.

Time Management

- Such as illness rate, illness value per FTE.

Facilitated Discussion

Discussion Questions

Use the following questions to engage the participants in the discussion. Feel free to use your own additional questions.

Lesson Summary

You should now be able to:

- Describe the reporting tools available

Unit Summary

You should now be able to:

- Describe the overall enterprise scenario, roles, and levels of reporting.
- Describe the reporting tools available

Unit 33

949

Human Resources Information System (HIS)

For more information, see the Instructor Guide in SAPNet.

Unit Overview

After completing this unit, you will be able to:

- Give an overview of Structural Graphics (HIS) reports
- Explain how to access this reporting tool
- Use Structural Graphics to access reports from various areas within Human Resources
- Create new areas and include reports in them

Unit Objectives

After completing this unit, you will be able to:

- Access and work with HIS
- Set up HIS according to the requirements of your enterprise

Unit Contents

Lesson: Initial HIS Access and Working with HIS

950

Lesson Duration: 30 Minutes

Lesson Overview

In this lesson, you learn about the initial HIS screen and how to work with HIS.

Lesson Objectives

After completing this lesson, you will be able to:

- Access and work with HIS

For more information, see the Instructor Guide in SAPNet.

Business Example

You use Organizational Management at your enterprise.

You want to use standard display options to create an overview of your enterprise's current overall structure. You then want to report on detailed structures.

Accessing HIS

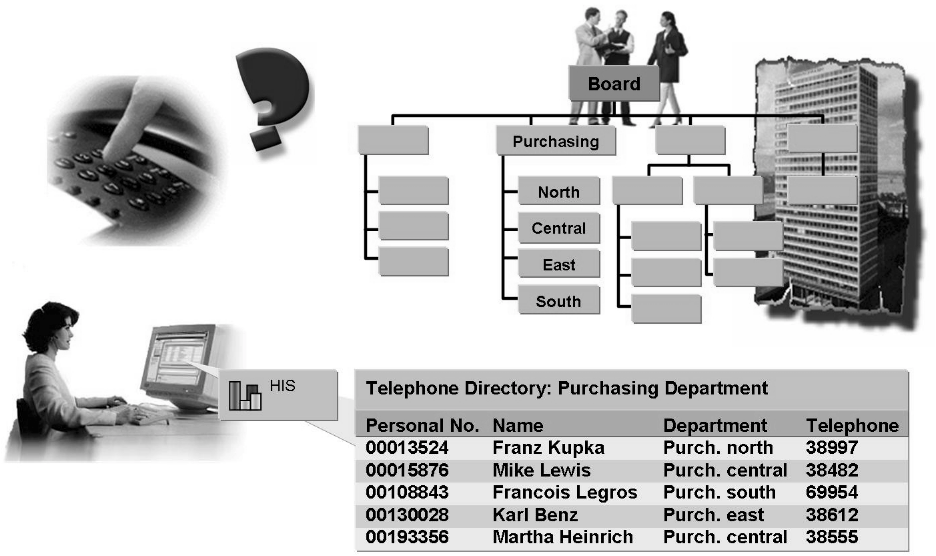


Figure 549: Human Resources Information System (HIS)

HIS makes it easy for you to **request reports using objects in a hierarchy** in the SAP System. The reports are started directly from **Structural Graphics**.

As a **prerequisite** for starting the graphics function in the Human Resources Information System, the system must contain data in a hierarchical structure. In the standard SAP System, they are:

- The **organizational structure** and
- The **business event hierarchy**

Procedure:

On the initial Structural Graphics screen, select the objects you want to report on. The reports that are available for the selected object are listed on a second screen. To access a report, double-click on it.

This procedure has the following **advantages**:

- You are *not required* to enter data in a report selection screen. The parameters set by the system are the same as the report selection parameters that are most frequently used in practice.
- You can access *reports from different HR components*, such as Personnel Administration and Recruitment, without having to switch from one application to another.

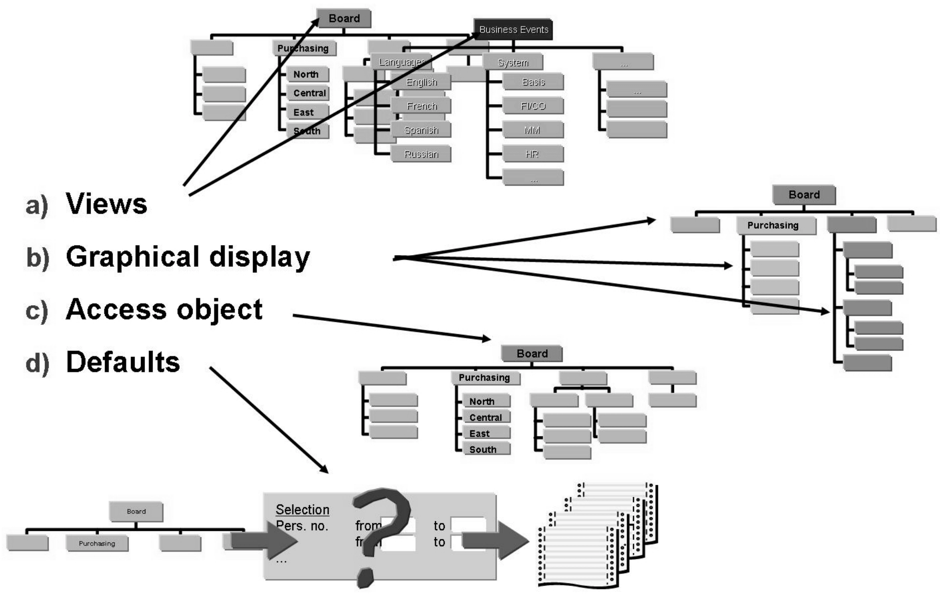


Figure 550: Accessing HIS: Overview

In the SAP Easy Access Menu, choose

Human Resources ⇒ Information System → Reporting Tools ⇒ HIS to access the **Initial Screen** of Structural Graphics (HIS).

The initial screen enables you to select:

- Views
- Graphical displays
- Access objects (with display and validity options)
- Defaults

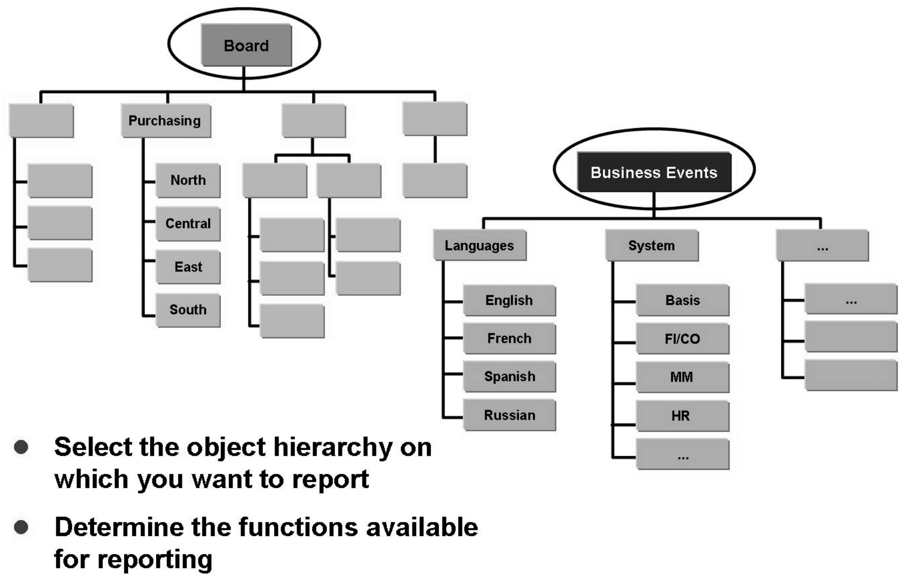


Figure 551: a) Views

Views enable you to select specific objects. The system includes two types of **object hierarchy**:

- Organizational units
- Business events

Views are context-specific, which means they differ from one enterprise to another.

The selection you make in the *View* field determines which functions are available in graphics display.

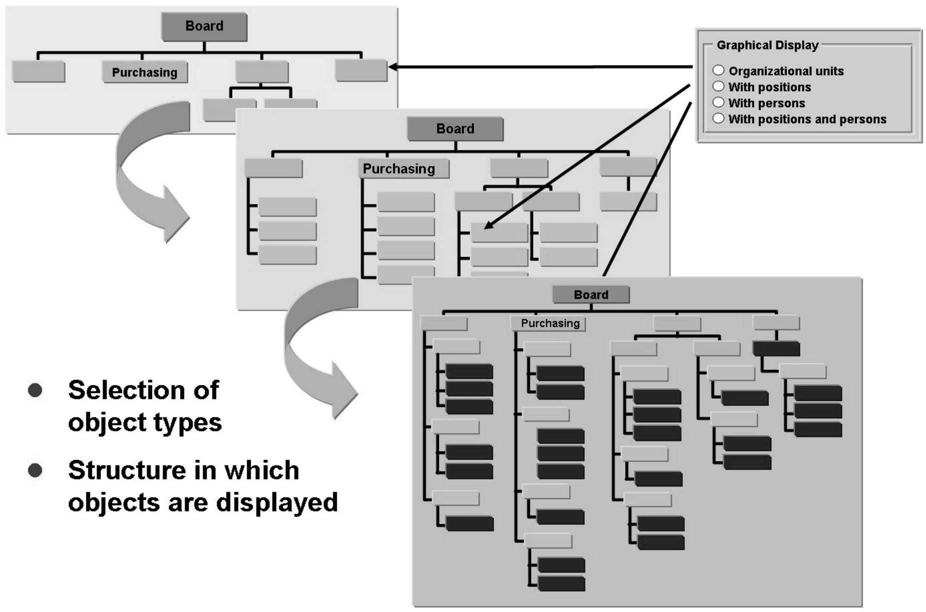


Figure 552: b) Graphical Display

In the **Graphical Display** group box, you can specify which **object types** are displayed in Structural Graphics. These are the only object types that can be used as access objects for reporting:

- Organizational view: **organizational units**
- Training and Event Management: **business event groups and types**

This setting also determines the structure in which objects are displayed.

Organizational Management, for example, provides you with the following options:

- Organizational units only
- Organizational units with positions
- Organizational units with persons
- Organizational units with positions and persons

Other views provide you with other appropriate options.

Hint: If your hierarchical structure is very big, you should restrict it accordingly to ensure that you still have an overview of the structure when it is displayed. Choose the part of the structure that you really need for your report. You should only choose to display persons, for example, if the organizational unit is very small.

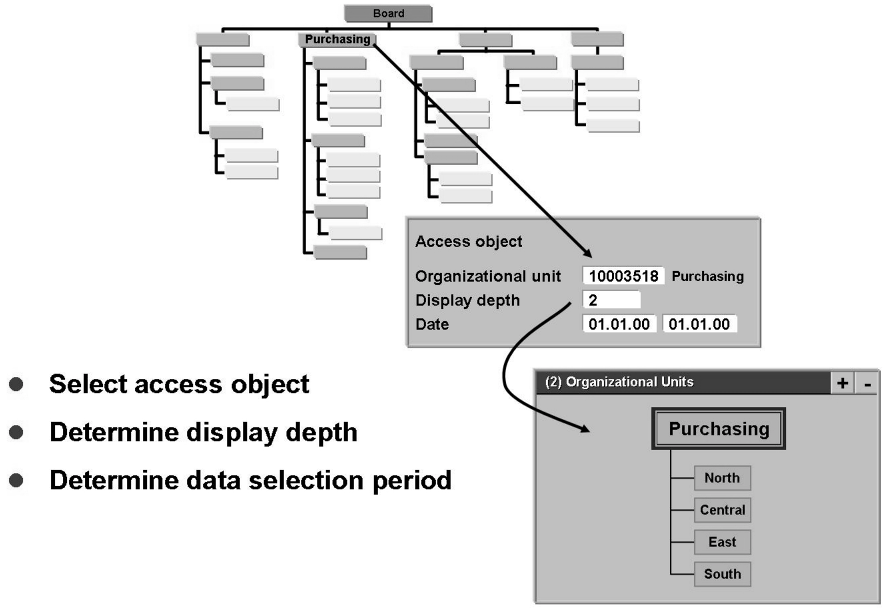


Figure 553: c) Options on the Initial Screen

The initial screen requires you to choose the organizational unit, event, or group as of which the hierarchical structure is displayed (that is, you must determine the **access object**).

In the **Display Depth** field, you can enter the number of hierarchical levels to be displayed in Structural Graphics.

Caution: The Display Depth field only affects how the object hierarchy is displayed. It does not affect reporting. Reporting takes place for lower levels too, irrespective of the display depth (unless determined otherwise).

Example:

You display your hierarchy of business event groups, and want to report on attendance numbers per event. The report runs on business events and attendees on hierarchical levels below the business event group you selected, not just on the business event group itself.

You can determine a reporting **validity period** in which the objects to be reported on are valid. The **period indicator** enables you to choose preset periods.

- **Defaults determine how reporting is started.**
- **The reporting period specifies the date on which reporting starts; the default value is today's date.**

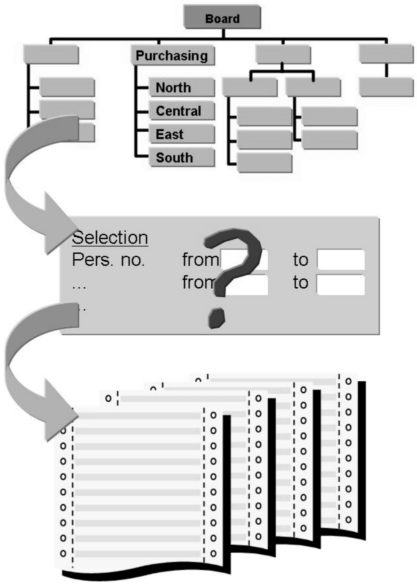


Figure 554: d) Defaults

HIS reports can be started and executed in a number of ways. The following settings are possible:

- **Start directly or via selection screen**

  You can start the report immediately, which means you do not need to enter additional data in a report selection screen. The programs are usually preset, and contain the required data. Alternatively, you can choose to access the report selection screen and enter additional data.

- **Reporting depth**

  You can start reporting for one object selected in Structural Graphics, or for an object and all of its lower-level objects. This selection only affects structural reporting.

- **Data retrieval depth**

  The advantage of HIS is that it can use HR master data to create a report for persons who are selected automatically when an organizational unit is chosen in a graphic. You need to specify whether the report runs on persons assigned to the selected organizational unit only, or on persons assigned to all of the lower-level organizational units too.

You can also change the standard settings from Structural Graphics.

Working with Structural Graphics

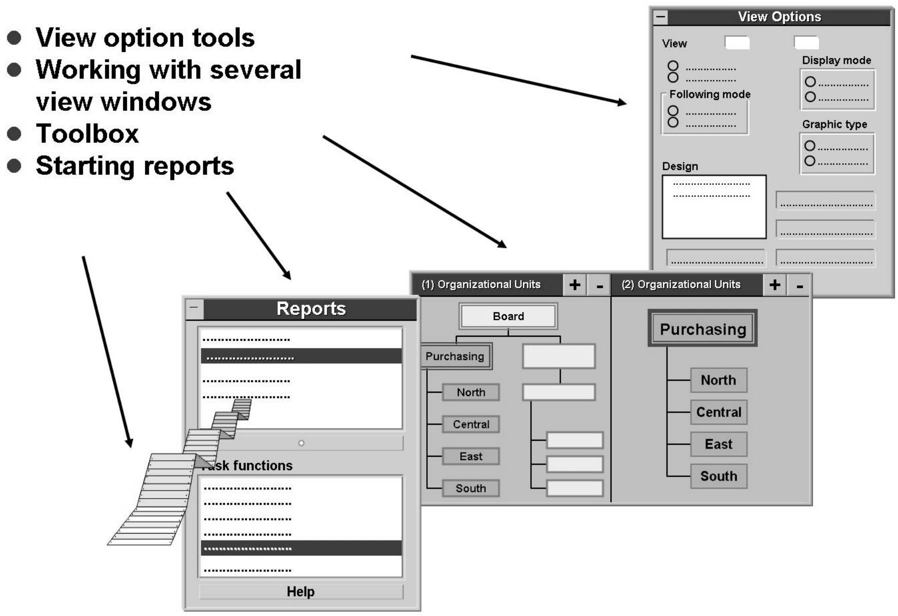


Figure 555: Structural Graphics: Overview

Structural Graphics includes a number of options that enable you to adapt graphics to your specific requirements, and start reporting.

Structural Graphics includes a menu bar with preset **customizing options** for views:

- **Detail <-> Overview.**

  For example, you can switch display from the short text to the long text of the object name.

- **Select Section**

  You can choose a section of the whole structure, which is enlarged and then displayed.

- **Substructure, overall structure**

  Display switches from the whole structure to the selected substructure, and vice versa.

- **View Options**

  The view options enable you to determine how Structural Graphics is displayed so that it meets your specific requirements. An additional window contains detailed options with which you determine Structural Graphics design. This includes the following settings: display mode, following mode, graphic type, design, object options, and line options.

Displaying an entire object hierarchy can prevent you from retaining a clear overview if the hierarchy in question is very large. Detail views enable you to display clearer overviews of individual substructures.

However, you might want to display an overview of the entire structure and a section of the structure at the same time so that you can see where the section of the structure is located within the entire hierarchy. To display both variants simultaneously, open another view window. The view options enable you to define this view window as a following mode in which the section of the structure is displayed. As a result, this second window always displays the object that you selected from the entire structure in the first window, together with its lower-level objects.

You can start reports from all view windows.

- **The Structural Graphics toolbox includes:**
  - **Reports**
  - **Task functions**
  - **Help**
- **The toolbox enables you to start reports directly**

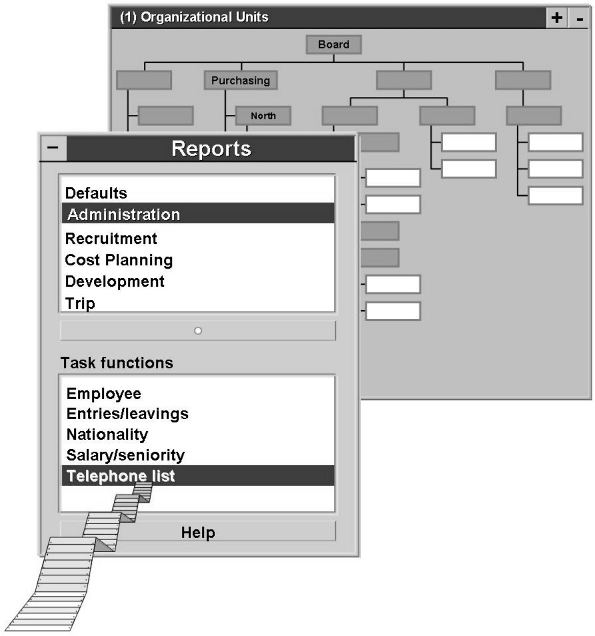


Figure 556: Structural Graphics: The Toolbox

The toolbox contains all of the reports available for the view and object hierarchy you have selected:

- The upper section of the toolbox lists the **areas** (HR components).
- The lower section of the toolbox lists the reports available for the areas in question (**task functions**).

The **Help** function enables you to access a description of the report you have selected.

To **start a report** directly, simply double-click on its title in the lower section of the toolbox.

Default settings can also be made from the toolbox.

Hint: If you have closed the **toolbox**, you can open it again by choosing *Edit⇒ Reporting*.

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Exercise 40: Initial Access and Working with HIS

Exercise Duration: 30 Minutes

Exercise Objectives

After completing this exercise, you will be able to:

- Access Structural Graphics in a number of different ways.
- Adjust the view options in Structural Graphics so that they meet your specific requirements.
- Give an overview of the functions included in the Structural Graphics toolbox.
- Start reports from Structural Graphics.

Business Example

You are an employee at the production plant in Hamburg and have HR responsibilities.

You want to use Structural Graphics to report on the data of employees that belong to the organizational unit for which you are responsible.

Task 1:

Access Structural Graphics (HIS) for IDES AG under *Executive Dir. Germany ⇒ Production and S&D ⇒ Production)*.

1. In the current plan version, select the view “STANDARD”.
2. To determine the correct access object, use the search help.

   Load Structural Graphics using the default setting for graphical display and without specifying a display depth (all levels are displayed for the selected objects). Do not specify a date; this is set automatically.

Task 2:

Management at the **Hamburg Production Department** of **IDES AG** requires a list of **telephone numbers** for the “**department responsible for assembling pumps in Germany**”. Management at the plant in Hamburg then requires a breakdown by **nationality** of all **employees** assigned to the **Hamburg** plant.

Start the required reports using the toolbox.

1. Familiarize yourself with the **areas** included in the toolbox, and their reports. To display information on individual reports, use the **help function**.

Continued on next page

2. Start the “***Telephone no.***” report for the “organizational unit responsible for assembling pumps in Germany”.

3. Start the “***Nationalities***” report for the Hamburg plant.

Solution 40: Initial Access and Working with HIS

Task 1:

Access Structural Graphics (HIS) for IDES AG under *Executive Dir. Germany ⇒ Production and S&D ⇒ Production)*.

1. In the current plan version, select the view “STANDARD”.

   a) In the SAP menu, choose

      Human Resources ⇒ Information System ⇒ Reporting Tools ⇒ HIS

      to call Structural Graphics.

      The first time you access Structural Graphics, the system requires you to enter the plan version you want to use. Enter “**01**” for the **current plan version**. Choose the **“Standard view”**.

2. To determine the correct access object, use the search help.

   Load Structural Graphics using the default setting for graphical display and without specifying a display depth (all levels are displayed for the selected objects). Do not specify a date; this is set automatically.

   a) Use the search help on the *Organizational unit* field and invoke a **structural search** to locate the object you require:

      IDES AG ⇒ Exec. Director - Germany ⇒ Production and S&D ⇒ Production (D) ⇒ Hamburg Production Site (object ID: 1000)

   b) Choose *Execute* to call Structural Graphics.

      Tip: Set the graphic to *Overview*.

Continued on next page

Task 2:

Management at the **Hamburg Production Department** of **IDES AG** requires a list of **telephone numbers** for the “**department responsible for assembling pumps in Germany**”. Management at the plant in Hamburg then requires a breakdown by **nationality** of all **employees** assigned to the **Hamburg** plant.

Start the required reports using the toolbox.

1. Familiarize yourself with the **areas** included in the toolbox, and their reports. To display information on individual reports, use the **help function**.
   a) To do so, select an area in the upper section of the toolbox. Search for the report you require in the list that is now displayed in the lower section of the toolbox.
   b) To access the documentation on a particular report, select the report and choose “*Help*”.
2. Start the “***Telephone no.***” report for the “organizational unit responsible for assembling pumps in Germany”.
   a) Use Structural Graphics to select the “**organizational unit responsible for assembling pumps in Germany**”.
   b) In the upper section of the toolbox, select the “**Administration**” area by clicking on it once, and then start the “**Telephone no.**” report in the lower section of the toolbox by double-clicking on Telephone no..
3. Start the “***Nationalities***” report for the Hamburg plant.
   a) Stop displaying the **telephone no.** report, and start the “**Employees**” report for the **Hamburg** plant. This report is also included in the **“Administration”** area.
   b) Close Structural Graphics.

Lesson Summary

You should now be able to:

- Access and work with HIS

Lesson: Customizing HIS

964

Lesson Duration: 30 Minutes

Lesson Overview

Once you have become familiar with how to operate HIS from the application point of view, you want to turn your attention to its Customizing.

Lesson Objectives

After completing this lesson, you will be able to:

- Set up HIS according to the requirements of your enterprise

For more information, see the Instructor Guide in SAPNet.

Business Example

- In Customizing, you configure HIS to suit the requirements of your enterprise.

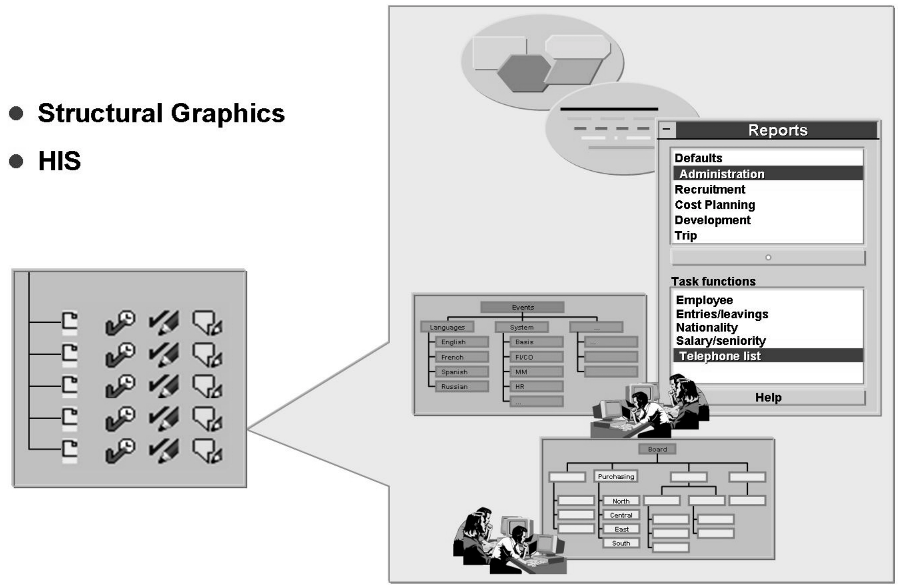


Figure 557: Customizing HIS

The standard system includes settings that you can adapt to meet your specific requirements.

Customizing includes two sections in which settings are made for the Human Resources Information System:

- To make your system settings for **Structural Graphics**, go to Customizing for Personnel Management and maintain the appropriate global settings.
- To adjust HIS, go to Customizing for the **Human Resources Information System**. In particular, you can create new **areas** and then include your own **reports** in them.

- **Structural Graphics enables you to integrate customer reports**

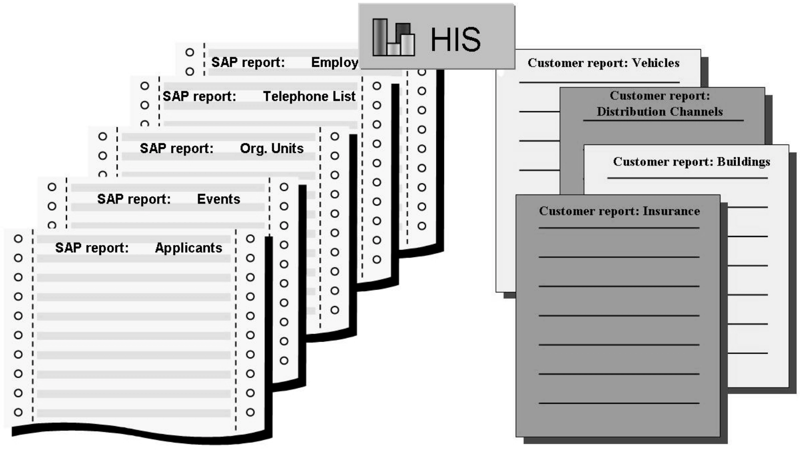


Figure 558: Customer Reports in Structural Graphics

You can create your own areas and then include your own reports in Structural Graphics.

New **areas** are created in the Implementation Guide (IMG) by choosing

Personnel Management → Human Resources Information System → HIS ⇒ Define

Areas.

To include customer **reports** in an area, in Customizing choose

Personnel Management → Human Resources Information System → HIS ⇒ Define Task

Functions.

Just like standard reports, you can start these reports directly by double-clicking on them in the appropriate toolbox area.

967 Exercise 41: OPTIONAL: Customizing HIS

Exercise Duration: 20 Minutes

Exercise Objectives

After completing this exercise, you will be able to:

- Add new areas to the HIS toolbox, and assign existing queries or reports to these areas.

Business Example

You want to categorize existing queries, and customer queries. Therefore, you want to create your own **areas** which will then contain the reports you require.

Task 1: Optional

Perform the required customizing activities.

1. Create a new area with the name **ZHR580##** in the data view ZHR580##.
2. Assign the following reports to this area:

Employee List:	RPLMIT00
Telephone List:	RPLTEL00

Task 2: Optional

1. Restart HIS, and determine whether the area in the data view ZHR580 you just created now exists. Start one of the reports that it contains.

Solution 41: OPTIONAL: Customizing HIS

Task 1: Optional

Perform the required customizing activities.

1. Create a new area with the name **ZHR580##** in the data view ZHR580##.

   a) Open a new window by choosing *System → Create ⇒ Session.*

   b) Use the SAP Easy Access Menu to access the Implementation Guide (IMG):

      Tools → Customizing ⇒ IMG ⇒ Execute Project.

      Choose SAP Reference IMG (pushbutton).

   c) Choose

      Personnel Management → Human Resources Information System → HIS ⇒ Define Areas

      Create a new area with the name **ZHR580##** (choose “New Entries”), and enter the text “Area Gr ##” for it. Choose *Save*.

   d) To assign the area to the ***ZHR580*** view, select the area and then switch to the ***Views for Area*** subnode in the dialog structure. By choosing ***New entries***, you can assign the ZHR580 view (select using input help function). Choose *Save* and return to the IMG.

      Hint: Ignore any messages output about name space at this point.

2. Assign the following reports to this area:

Continued on next page

Employee List:	RPLMIT00
Telephone List:	RPLTEL00

a) In the Implementation Guide, choose

Personnel Management → Human Resources Information System → HIS ⇒ Define Task Functions

Assign the reports listed above (task functions):

b) To do so, use appropriate templates (e.g. in group ****, area HRADM), select the templates and choose *Copy As* and change the area to your area ZHR580##.

Hint: Confirm the info message about the namespace.

c) Choose *Save* and return to the IMG.

Task 2: Optional

1. Restart HIS, and determine whether the area in the data view ZHR580 you just created now exists. Start one of the reports that it contains.

a) Switch back to the application mode.

b) Start HIS again, this time with the view ZHR580. Your area and its assigned reports are displayed in the toolbox.

c) Start your reports.

Lesson Summary

You should now be able to:

- Set up HIS according to the requirements of your enterprise

Unit Summary

You should now be able to:

- Access and work with HIS
- Set up HIS according to the requirements of your enterprise

Unit 34

973

Manager's Desktop (MDT) and Manager Self-Service (MSS)

For more information, see the Instructor Guide in SAPNet.

Unit Overview

After completing this unit, you will be able to:

- Use Manager's Desktop to report on the data of employees assigned to you
- Add customer categories and functions to Manager's Desktop

Unit Objectives

After completing this unit, you will be able to:

- Use Manager's Desktop
- Use Manager Self-Service

Unit Contents

Lesson: Manager's Desktop (MDT)

974

Lesson Duration: 30 Minutes

Lesson Overview

In this lesson, you learn how to work with the Manager's Desktop and how to customize MDT.

Lesson Objectives

After completing this lesson, you will be able to:

- Use Manager's Desktop

For more information, see the Instructor Guide in SAPNet.

Business Example

- The managers in your enterprise need an easy-to-use tool that supports them day-to-day in their administrative, organizational, and strategic tasks.
- To make informed decisions, managers need an adequate information base that draws on a range of reports.

Working with MDT

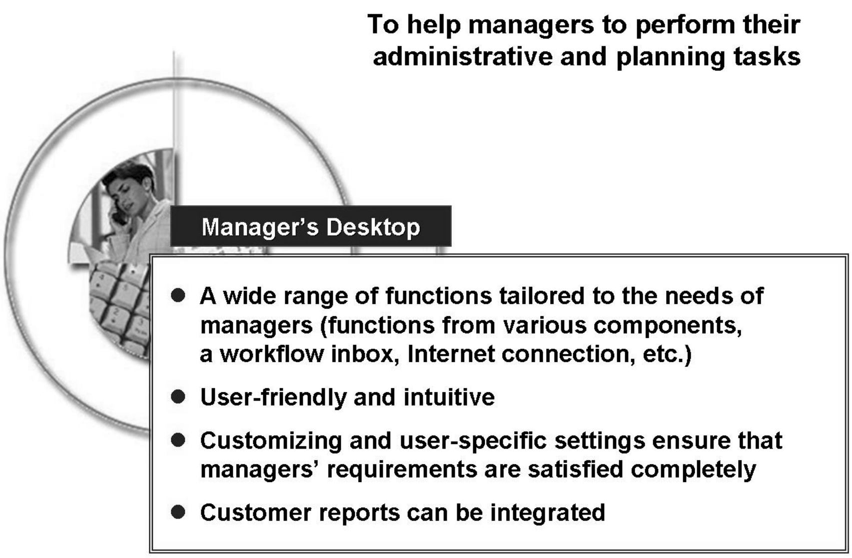


Figure 559: Manager's Desktop: Goals

Manager's Desktop is tailored to the daily needs of managers - line managers, for example - by helping them to perform their administrative, organizational, and strategic tasks.

Manager's Desktop gives managers **decision support** when making Human Resource decisions and when performing **strategic planning activities** by providing them with swift access to required HR data of directly and indirectly subordinate employees. It then enables them to **report** on this data.

Managers can also execute **cross-application functions**: for example, they can execute workflow tasks (work items) or start reports from Controlling. *Manager's Desktop* can be used to execute a wide range of **standard reports** from HR and Controlling, as well as customer reports. Its Web browser **integration** means that *Manager's Desktop* enables managers to display **intranet and Internet pages.**

Drag&Drop functions make it easier for users to perform tasks.

Finally, *Manager's Desktop* supports the growing trend of **decentralizing Human Resource tasks and responsibilities.** By transferring more and more tasks to line managers, HR departments can concentrate their efforts on key HR activities and free resources for new services.

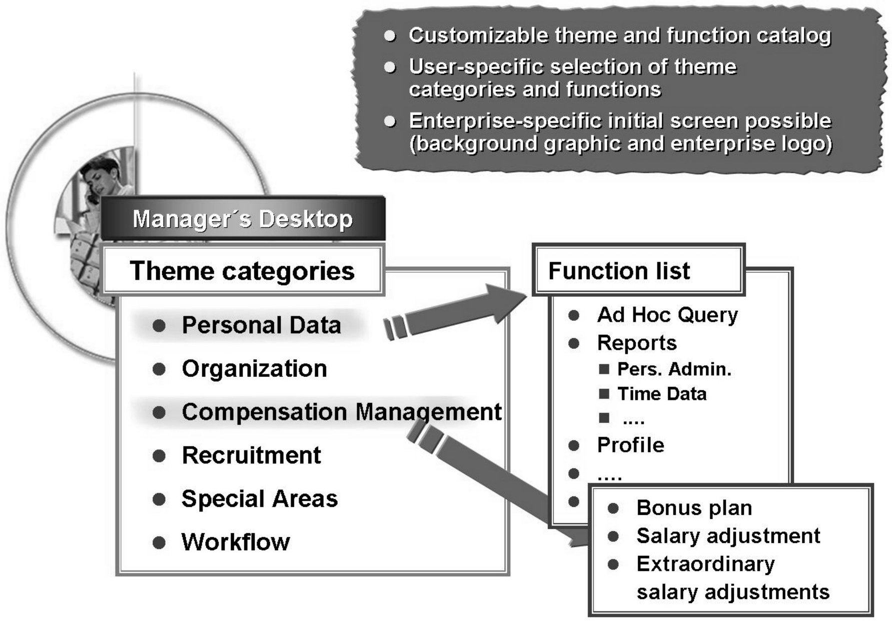


Figure 560: Manager's Desktop: Initial Screen

The **initial screen** provides an overview of the default **main scenario** in Manager's Desktop (MDT), which consists of the six **theme categories** listed above and their **function lists**.

The **function codes in Customizing** can be used to put these categories into customer-specific hierarchies. The categories can also be enhanced with customer-specific functions.

Furthermore, the user can deactivate unnecessary categories and functions on the initial screen and on the various screens of the different application components. It is always possible to switch between user settings and standard settings.

The initial screen can be adapted to customer-specific requirements in **Customizing**. For example, it can be enhanced with an **enterprise logo** and/or **background picture**.

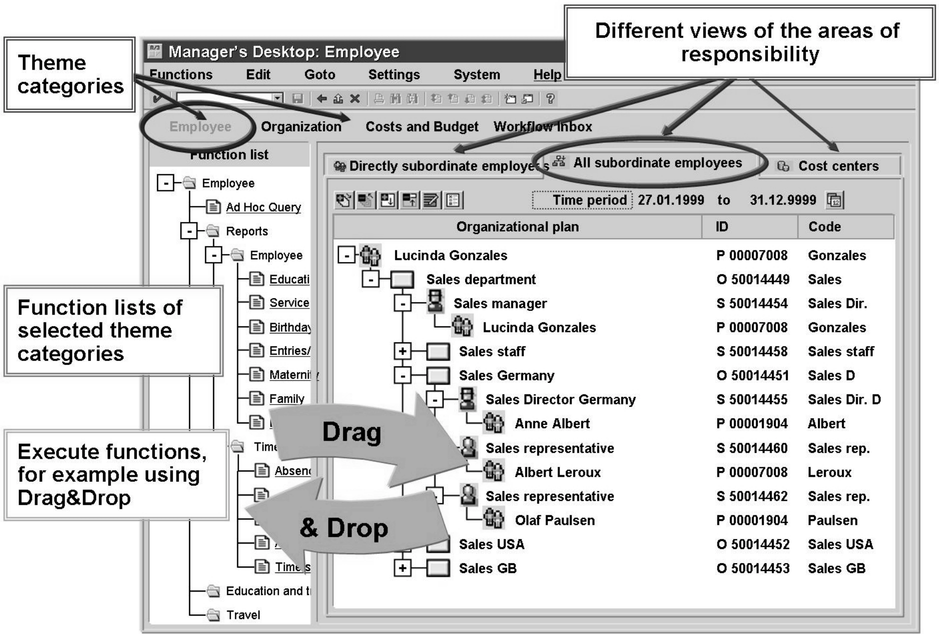


Figure 561: Working with Manager's Desktop

In the **theme categories** *Employee, Organization, and Compensation Management*, the screen is divided into a right screen area, showing the **organizational area of responsibility** of the user, and a left screen area, where there is a list of the default or preset **functions**.

By choosing tab pages in the right screen area, you can access different **views** of your area of responsibility. Each tab page represents an evaluation path.

If you choose the ***Directly subordinate employees*** tab page, the system displays in the tree structure only organizational objects (organizational units, positions, and holders) for which you are directly responsible. If you choose the ***All subordinate employees*** tab page, the system displays all organizational objects, including those for which you are indirectly responsible. If you choose the ***Cost centers*** tab page, the system displays all organizational objects (that is, also those that are indirectly subordinate) with assigned master cost centers, where these exist for

the organizational units shown. The tab page ***Project Assignments*** displays all PSP elements to which positions or organizational units in the manager's area of responsibility are assigned.

You can execute the functions in the function list in various ways. The Drag&Drop method is particularly easy. You can **Drag&Drop** from right to left by selecting one or more objects in the org. structure, holding down the left mouse button, and dragging the mouse to the desired function - for example to a report - in the function list. The function is executed for all selected objects. You can also Drag&Drop from left to right. In addition, you can use Drag&Drop to move organizational objects within the tree structure.

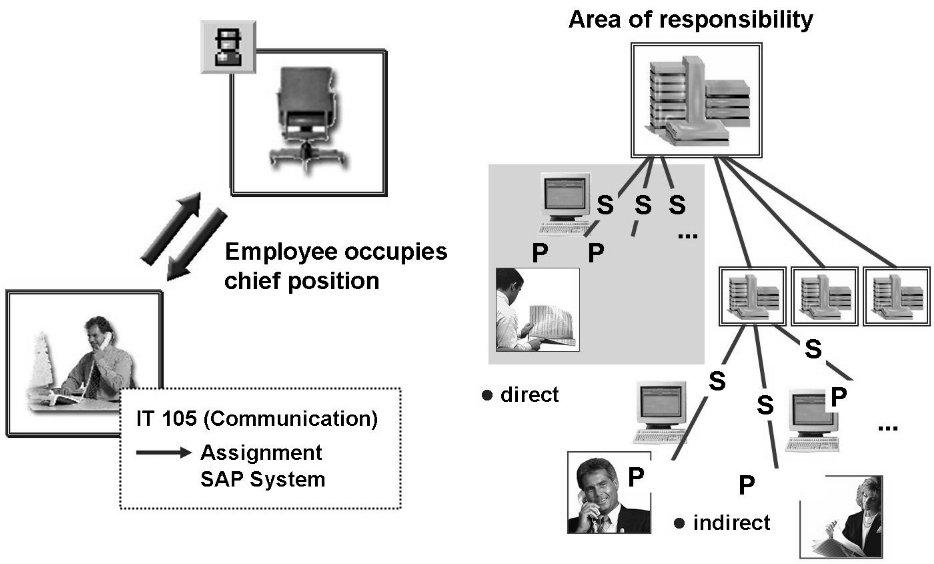


Figure 562: Prerequisites

If you want to use the functions provided by Manager's Desktop, you **must first** use the ***Organizational Management*** application component to create an organizational plan for your enterprise, and display the organizational structure and staff assignments (that is, the assignment of persons or users to positions).

When a user (manager) logs on, the system determines all the organizational units that are headed by him or her. The user then sees a tree structure containing the selected organizational units with their **positions** and assigned **holders**. These can be edited using a function list, for example. The area of responsibility displayed is only ever a section of the enterprise's organizational plan, unless the manager concerned is the head of the whole enterprise.

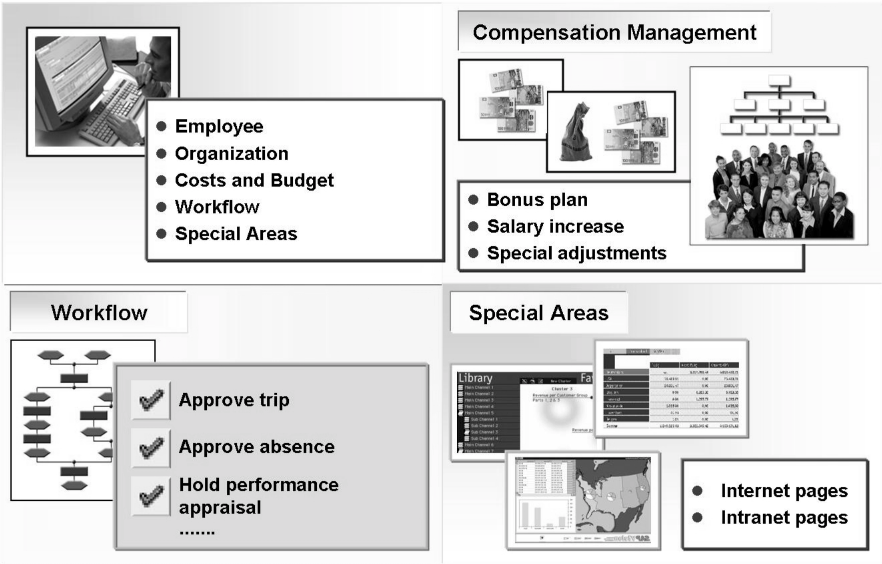


Figure 563: Theme Categories

The ***Compensation Management*** theme category comprises functions that enable you to execute cost center accounting functions (*CO - Controlling* component), plan and display required positions for your area of responsibility, and allocate performance bonuses and salary adjustments for the employees in your area of responsibility (*HR Compensation Management* component). This includes

- Determining performance bonuses
- Making salary adjustments
- Determining extraordinary adjustments

A manager's **workflow tasks** are listed in the workflow inbox. Each work item has the attributes description, priority, date of receipt, and task. The work items can be sorted in ascending or descending order according to these attributes. As soon as a work item has been executed, the workflow inbox is updated.

The integration of a Web browser means that you can display intranet or Internet pages relevant to your enterprise in Manager's Desktop, under the ***Special Areas*** theme category.

Customizing MDT

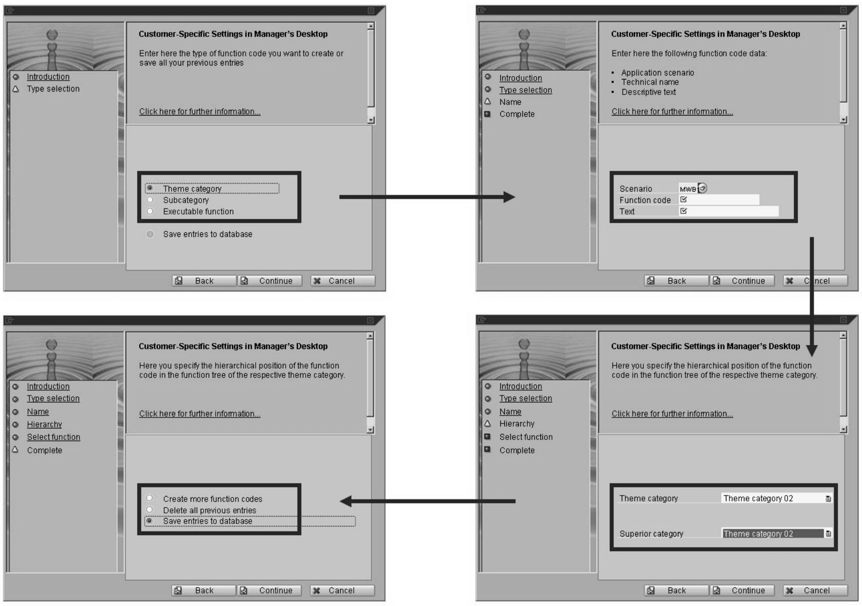


Figure 564: Customizing: Defining Function Codes with the Wizard

In Customizing, you can adjust the **theme categories** and the **functions** they contain.

In Customizing, choose

Personnel Management → Manager’s Desktop ⇒ Enhancement of Function Codes ⇒ Wizard for Defining Function Codes

to access an easy-to-use Customizing tool.

The tool enables you to **create** and **assign**:

- Theme Categories
- Subcategories
- Functions (transactions, function modules, reports, URLs)

They are then available to the user in Manager's Desktop.

981 # Exercise 42: Manager's Desktop (MDT)

Exercise Duration: 30 Minutes

Exercise Objectives

After completing this exercise, you will be able to:

- Start reports for an organizational plan using Manager’s Desktop
- Create new theme categories in Manager’s Desktop, and assign functions to them.

Business Example

You are the line manager of a given department. You use the intuitive, easy-to-use interface of the Manager’s Desktop to request reports about your employees.

Task 1:

Execute reports for an organizational plan using Manager’s Desktop:

1. In your organizational structure, find people who are (directly and indirectly) subordinate to you.
2. Display the birthdays of employees assigned (directly and indirectly) to you.
3. Display unoccupied positions that are assigned (directly and indirectly) to you. Switch to the theme category *Organization*.

Task 2: Optional

Hint: This exercise is optional since technical restrictions prevent multiple users from accessing the wizard at the same time. For this reason, not all changes will be saved.

Create new theme categories, subcategories, and functions (in the MWB1 scenario):

1. In Customizing, in theme category ZHR580 *Theme Category HR580*, create a new subcategory called **ZHR580##** (group ##)
2. To this subcategory, assign the report:

   Employee List RPLMIT00 (function code ZHR580##_01)

   as well as the

   URL of the **SAP Homepage** (http://www.sap.com) (function code ZHR580##_02)

Continued on next page

.

3. Check whether the functions in your subcategory are available in Manager's Desktop. Call MDT again.

Solution 42: Manager's Desktop (MDT)

Task 1:

Execute reports for an organizational plan using Manager's Desktop:

1. In your organizational structure, find people who are (directly and indirectly) subordinate to you.
   a) Choose *Human Resources ⇒ Manager's Desktop.*
   b) On the initial screen of Manager's Desktop, choose the *Personal Data* theme category.
   c) Expand the tree structure on the *Directly subordinate employees* and *All subordinate employees* tab pages.
2. Display the birthdays of employees assigned (directly and indirectly) to you.
   a) Expand the "*Reports*" folder (on the left side of the screen) until you see the report *Birthdays.*
   b) To display the birthdays of the people in your organizational structure, select your organizational unit (making sure that you are on the *All subordinate employees* tab page).
   c) Hold down the left mouse button, and drag the cursor to the *Birthdays* report.
3. Display unoccupied positions that are assigned (directly and indirectly) to you. Switch to the theme category *Organization*.
   a) Expand the "*Planning and Administration*" folder (on the left side of the screen) until you see the report *Unoccupied Positions.*
   b) Ensure that you are on the tab page "*All subordinate employees*".
   c) Select your organizational unit.

      Hold down the left mouse button, and drag the cursor to the *Unoccupied Positions* report.

Continued on next page

Task 2: Optional

Hint: This exercise is optional since technical restrictions prevent multiple users from accessing the wizard at the same time. For this reason, not all changes will be saved.

Create new theme categories, subcategories, and functions (in the MWB1 scenario):

1. In Customizing, in theme category ZHR580 *Theme Category HR580*, create a new subcategory called **ZHR580##** (group ##)

   a) Go to the Implementation Guide (IMG) by choosing:

      Tools → Customizing ⇒ IMG ⇒ Edit Project

      Choose SAP Reference IMG (pushbutton).

      Follow the instructions under:

      Personnel Management → Manager's Desktop ⇒ Enhancement of Function Codes ⇒ Wizard for Defining Function Codes

      Choose Continue until you can select the option "*Subcategory.*" Choose Continue.

   b) The scenario MWB1 is preset. Enter the function code *ZHR580##* and the text *Subcategory Group ##.* Choose Continue.

   c) Choose "*ZHR580 Theme Category HR580*" both as theme category and as higher-level category.

   d) Select "*Save entries to database*" and choose Continue.

   e) A dialog box appears prompting you to save the data to a workbench request. If no workbench request has been created for your user group yet, you must create a request now by choosing Create Request. You must enter the corresponding short description for the request.

      Choose Save.

      The request is created. You can now save data to your new request. Choose Continue.

   f) Choose Complete.

2. To this subcategory, assign the report:

   Employee List RPLMIT00 (function code ZHR580##_01)

   as well as the

Continued on next page

URL of the **SAP Homepage** (http://www.sap.com) (function code ZHR580##_02)

.

a) Follow the instructions under:

Personnel Management → Manager's Desktop ⇒ Enhancement of Function Codes ⇒ Wizard for Defining Function Codes

Choose Continue. On the next screen, select the option "*Executable function.*" Choose Continue.

b) Create a function *ZHR580##_01* with the long text *Employee Group*. Choose Continue.

c) Select the theme category "*ZHR580 Theme Category HR580*" and as higher-level category, select the subcategory you just created "*ZHR580## Subcategory Gr##.*" Choose Continue.

d) On the next screen, select the function type REPORT and enter the program name RPLMIT00. Choose Continue.

e) Select the option Create more function codes and proceed as in steps (a) to (c) to create the URL of the SAP Homepage (function code name: ZHR580##_02; long text SAP Homepage).

f) On the next screen, select the *function type WWW* Address with (or without) navigation keys and enter the WWW address http://www.sap.com. Choose Continue.

g) Select Save entries to database and confirm the workbench request prompt by choosing Continue.

h) Choose Continue and / or Complete.

3. Check whether the functions in your subcategory are available in Manager's Desktop. Call MDT again.

a) Note in particular the selection of your subcategory in the theme category ZHR580 *Theme Category HR580*.

b) Start the report or the Homepage.

Lesson Summary

You should now be able to:

- Use Manager's Desktop

Lesson: Manager Self-Service (MSS)

987

Lesson Duration: 30 Minutes

Lesson Overview

In this lesson, you learn how to work with Manager Self-Service.

Lesson Objectives

After completing this lesson, you will be able to:

- Use Manager Self-Service

For more information, see the Instructor Guide in SAPNet.

Business Example

You require an easy-to-use tool that your managers can use on a Web interface that includes budget tracking functions.

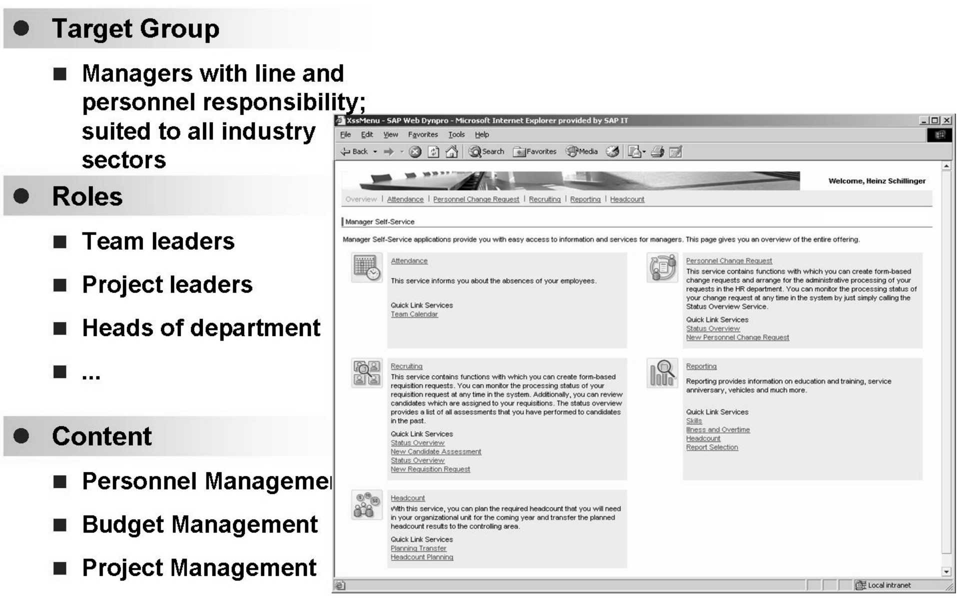


Figure 565: Manager Self-Service: The Portal Solution

The functions are delivered in business packages.

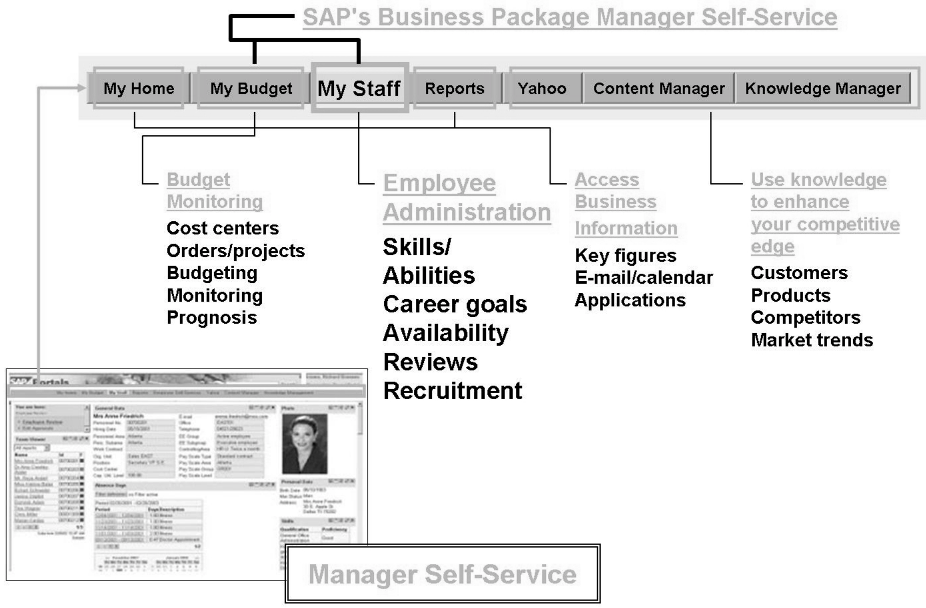


Figure 566: Overview of Manager Self-Service

The Business Package Manager Self-Service (MSS) supports line managers, project managers, and team leaders in their daily tasks and gives them access to information that is relevant to them.

Managers with personnel responsibility have direct access to all information relevant to their employees and area of responsibility when they log on to the portal. They can see at a glance what employees are on leave or who is available.

They can start human resources business processes directly from the portal. For example, after an employee appraisal, directly from the portal the manager can arrange for the employee to receive a bonus.

Manager Self-Service contains a wide range of reporting options and reports based both on the standard reporting functions in R/3 and on the Business Information Warehouse (BW). Customers that do not have BW implemented can use MSS without any restrictions.

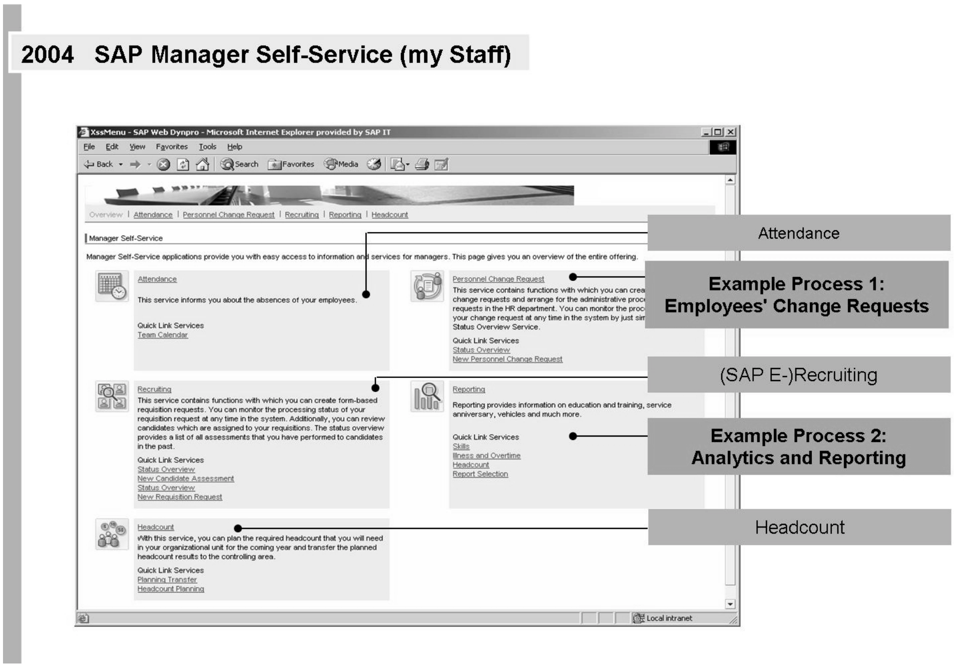


Figure 567: Area Group Pages MSS – Content in mySAP ERP 2005

SAP MSS HR Content in mySAP ERP 2005 based on WebDynpro:

- Attendance
- Employees' Change Requests
- Recruitment/E-Recruiting
- Analytics and Reporting
- Headcount Planning

Highlights:

- Integration of Adobe Designer
- Integration of E-Recruiting

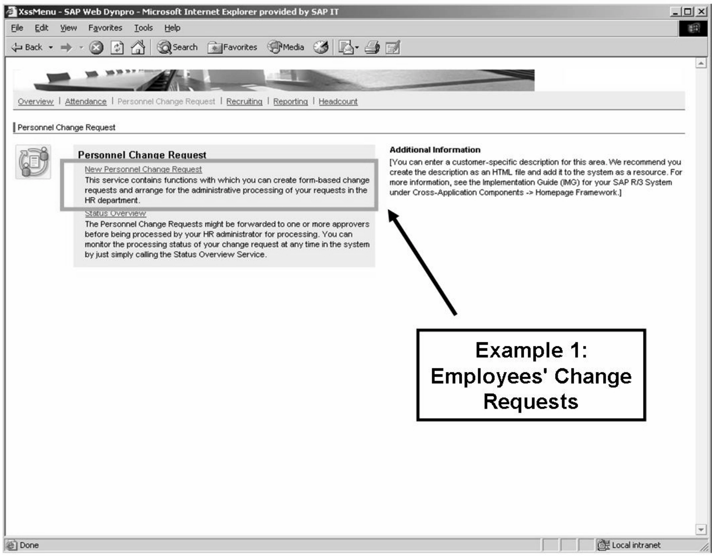


Figure 568: Area Page: Example 1 Employees' Change Request

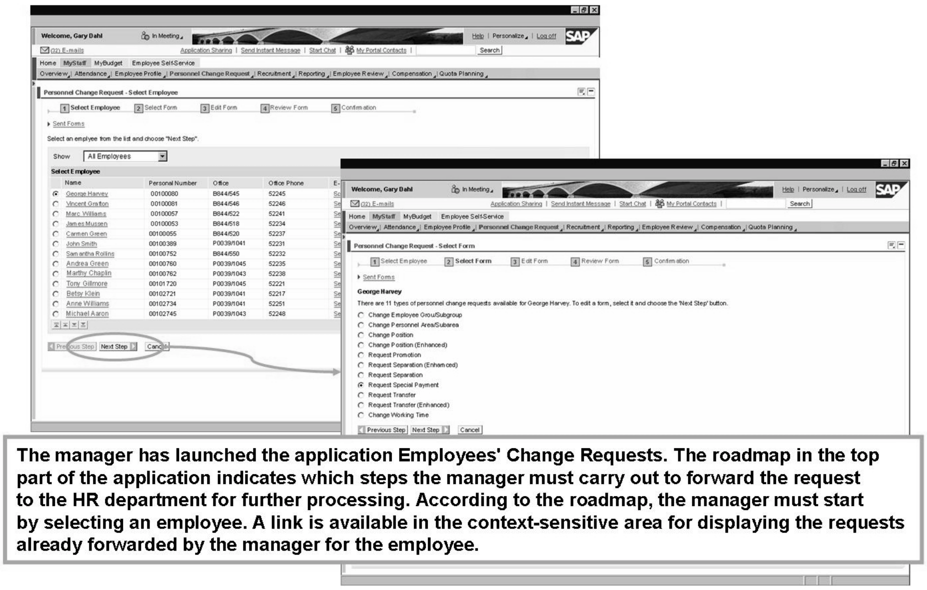


Figure 569: Application: New Change Request for Employee Data

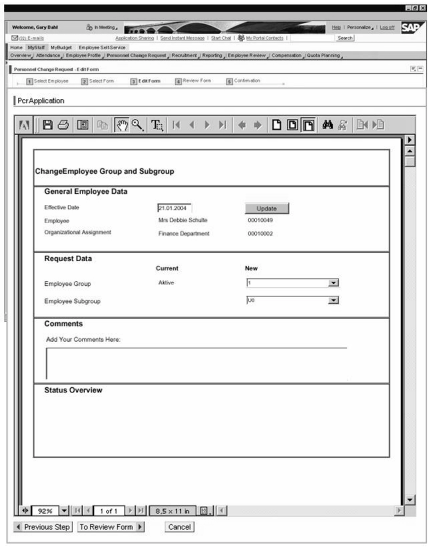


Figure 570: Employees' Change Request

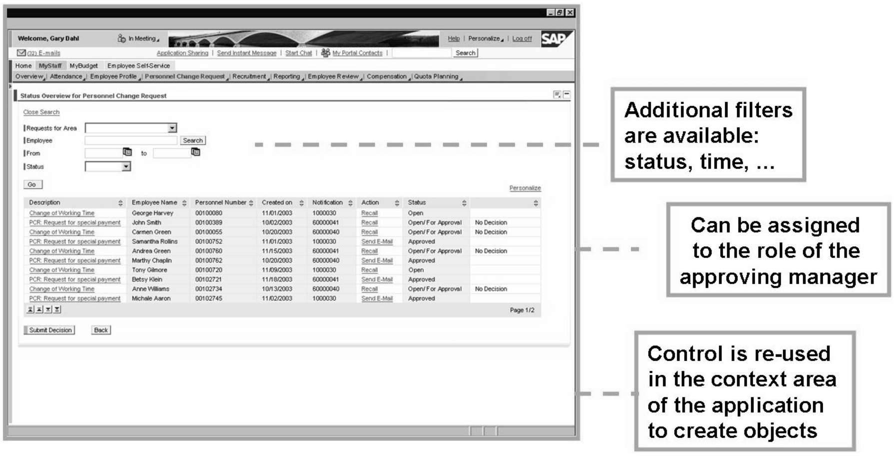


Figure 571: Employees' Change Request - Status Information

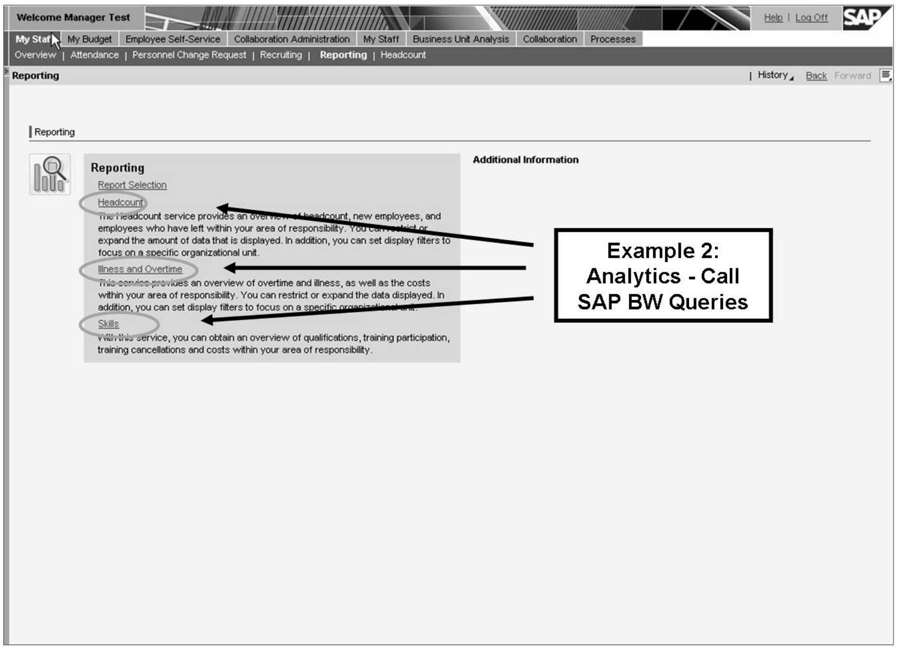


Figure 572: Reporting: BW Queries

On this page, the manager selects a query from the list. The standard system contains the following queries:

- Headcount
- Overtime and number of employees off sick
- Personnel Development

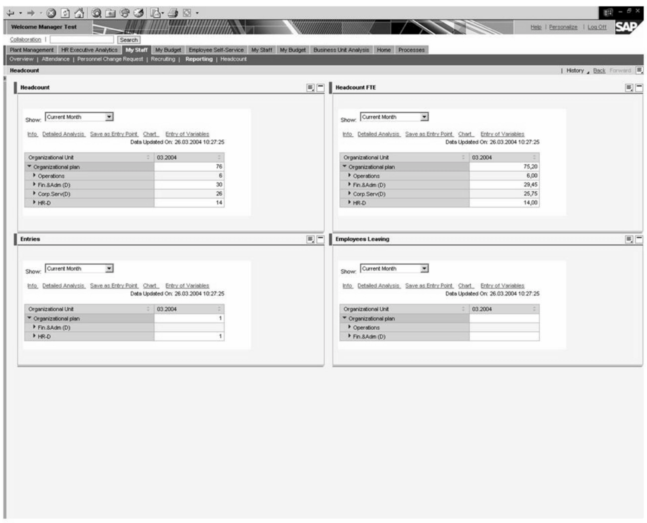


Figure 573: Reporting: BW Query Headcount - Table View

Headcount Overview

This service is supported by the BW cockpit and four BW reports. The manager can change the reporting period via the drop-down list on the upper edge of the screen, for example to:

- Current month
- Last 4 quarters
- Last 12 months

Each of the four reports provides a summary of the data in graphic format. To display more details, the manager simply double-clicks on the graphic.

Headcount Details

Click Detail to display the detail view.

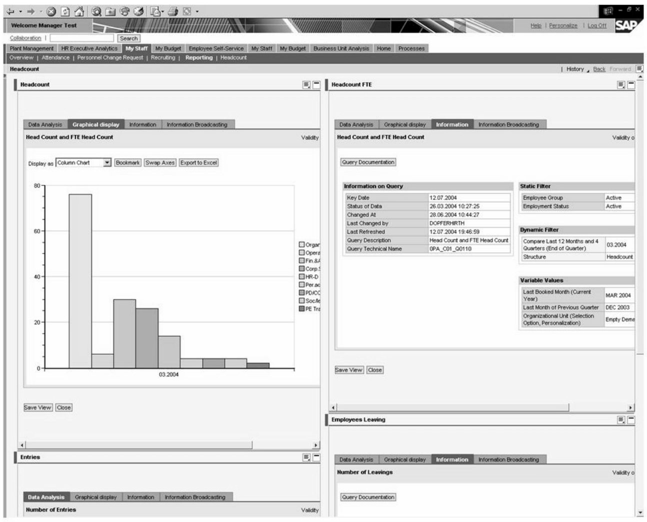


Figure 574: Reporting: BW Query Headcount – Graphic View and Information View

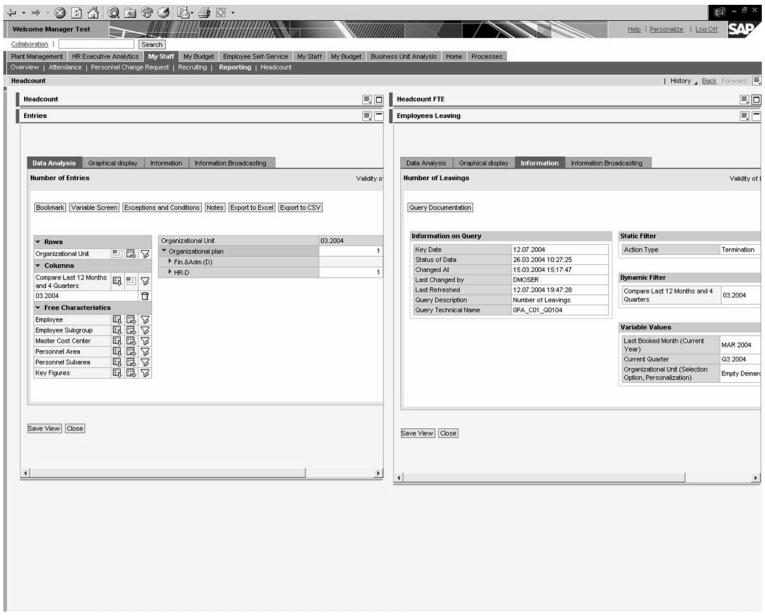


Figure 575: Reporting: BW Query Headcount – Data Analysis View and Information View

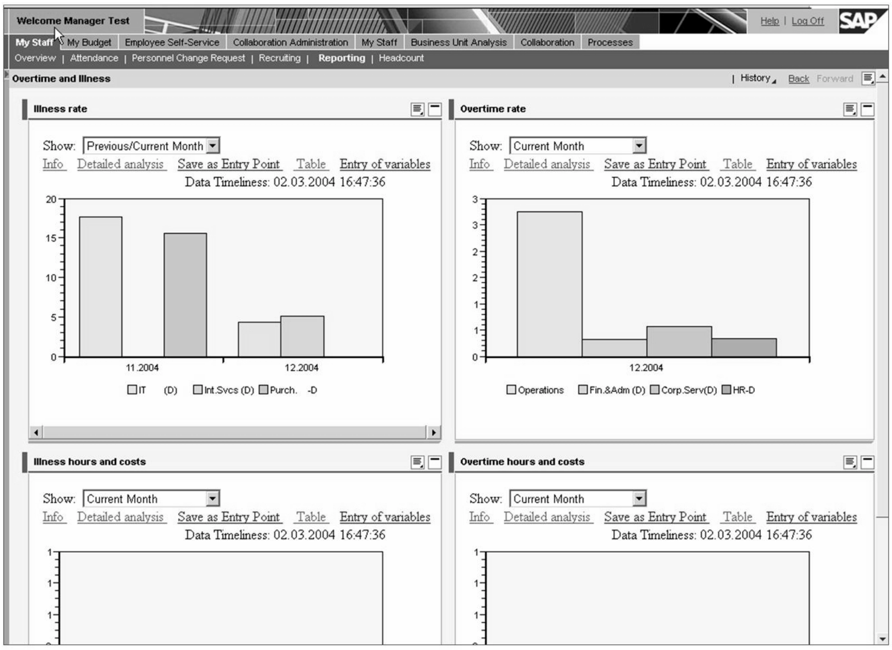


Figure 576: Reporting: BW Query Overtime and Number of Employees Off Sick

Overtime and Number of Employees Off Sick

This Web Cockpit provides the manager with an overview of employees' overtime and the number of employees off sick and the resulting costs incurred. The Web Cockpit contains the following BW queries:

- Employees off sick: relationship between sick time and planned working time
- Overtime: relationship between overtime and planned working time
- Costs incurred by sick time
- Overtime and costs

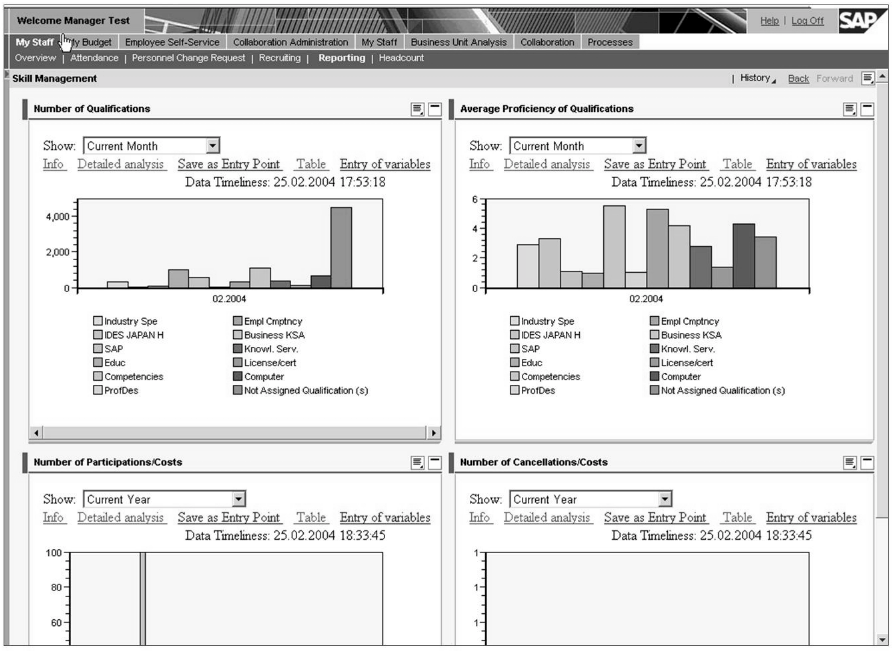


Figure 577: Reporting: BW Query Qualifications

Qualifications

This Web Cockpit provides an overview of the skills and qualifications of the employees in the manager's area of responsibility. It contains the following BW queries:

- Qualifications: Qualifications are displayed for active employees (filter via employment status and employee group).
- Course Attendance and Cancellation (and Resulting Costs Incurred)

- **Your enterprise must have an organizational plan.**

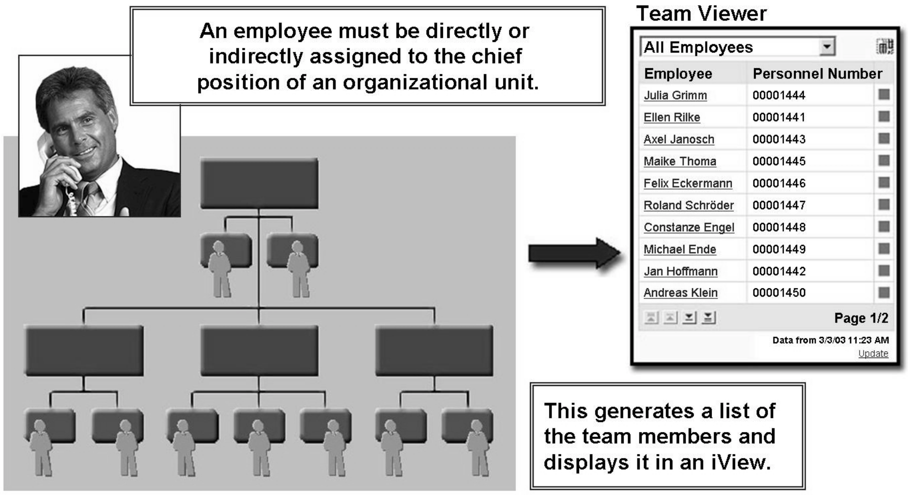


Figure 578: Prerequisites for Manager Self-Service in EP

If you want to make the best use of the Manager Self-Service in your enterprise, you must use and maintain Organizational Management (OM).

You must uniquely assign an employee to the chief position of an organizational unit.

Besides the advantages it provides for Manager Self-Service, there is a wide range of other functions that can be used in conjunction with OM, such as in the area of SAP WebFlow.

Facilitated Discussion

Discussion Questions

Use the following questions to engage the participants in the discussion. Feel free to use your own additional questions.

Lesson Summary

You should now be able to:

- Use Manager Self-Service

Unit Summary

You should now be able to:

- Use Manager's Desktop
- Use Manager Self-Service

Unit 35

999

Info Systems in the SAP Easy Access Menu

For more information, see the Instructor Guide in SAPNet.

Unit Overview

After completing this unit, you will be able to:

- Execute reports from the SAP Easy Access Menu
- Create new info systems, and adapt existing info menus so that they meet your requirements

Unit Objectives

After completing this unit, you will be able to:

- Execute reports from the SAP Easy Access Menu
- Create new info systems, and adapt existing info menus so that they meet your requirements

Unit Contents

Lesson: Info Systems in the SAP Easy Access Menu

1000

Lesson Duration: 40 Minutes

Lesson Overview

Call reports from the Info System and define your own role (user menu) to enable you to integrate customer reports and define the menu structure to meet customer-specific requirements.

Lesson Objectives

After completing this lesson, you will be able to:

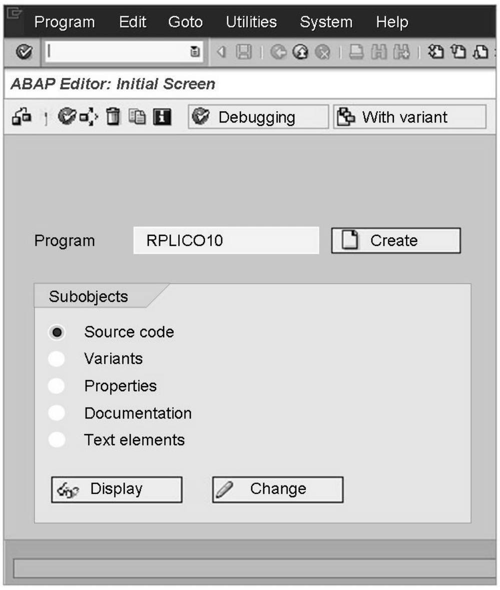
- Execute reports from the SAP Easy Access Menu
- Create new info systems, and adapt existing info menus so that they meet your requirements

For more information, see the Instructor Guide in SAPNet.

Business Example

- You are responsible for executing a variety of reports on a regular basis.
- To do so, you use the info systems in the SAP Easy Access Menu.
- You adjust the SAP Easy Access Menu so that it meets your requirements by creating new area menus with their own reports.

Execute Reports



- Reports can be executed from the ABAP Workbench
- Prerequisites:
  - You have Workbench authorization
  - You know the technical name of the report

Figure 579: Standard Reporting:Reporting Using the ABAP Workbench

You can execute SAP standard reports directly from the **ABAP Editor** (Workbench). The prerequisites for doing so are that you have the appropriate authorization, and that you know the technical name of the report in question. Start the ABAP Editor in the SAP Easy Access Menu by choosing: *Tools → ABAP Workbench ⇒ Development ⇒ ABAP Editor.*

Alternatively, you can start a report from the menu by choosing: *System → Services ⇒ Reporting.*

Naming conventions are used to group HR-specific reports together. For example:

Name:	**Reports for:**
RP...	Personnel Administration (PA)
RH...	Organizational Management and Personnel Development (PD)
RPT...	Time Management
RPC...	Payroll
RPL...	List Reports in Personnel Administration
RPB...	Statements
RPR...	Travel Expenses
RPAQ...	ABAP Query
RPAPL...	Recruitment

- SAP standard reports are integrated with the SAP Easy Access Menu
- In HR components, the reports for a given application are stored in the Info systems folder
- You can access lists of all HR reports from the menu by choosing

  Human Resources -> Information System -> Reports
- Reports that are frequently required can be added to your favorites

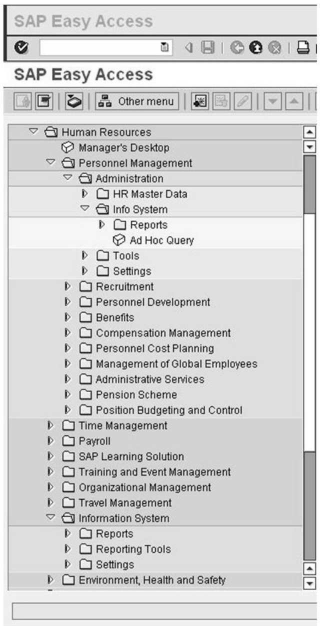


Figure 580: Info Systems in the SAP Easy Access Menu

In Release 4.6B, area menus were converted to **tree navigation** (SAP Easy Access Menu). The former **report trees** are now integrated with the application as **info systems** and can be enhanced with new reports and queries.

You can search for standard reports in individual applications or across applications. Application-specific standard reports are available in the info systems of individual HR components. In the SAP Easy Access Menu, HR standard reports are also grouped together in comprehensive info systems.

You can access the different **info systems** of individual **HR components** by choosing:

- *Human Resources ⇒ <Component> ⇒ <Info System> ⇒ Reports*
- *Human Resources ⇒ Payroll ⇒ <Continent> ⇒ <Country> ⇒ Info System*
- *Human Resources ⇒ Time Management ⇒ <Component> ⇒ Info System*

HR Info System

As well as containing reporting tools, the HR Information System contains all HR-specific reports. Its structure corresponds to the HR components. Within the components, reports are grouped together by subject matter. This makes it easier for you to find specific reports. To access the HR Information System, choose:

Human Resources ⇒ Information System → Reports

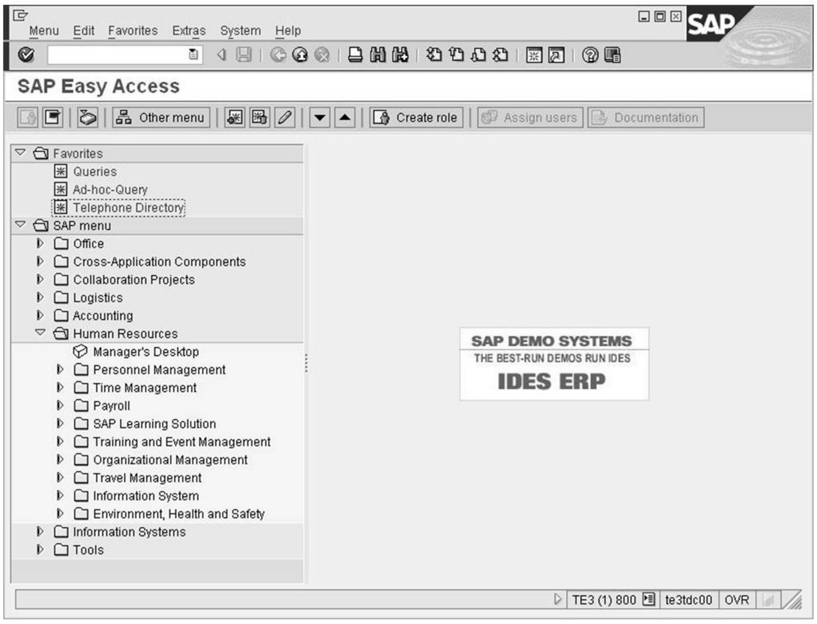


Figure 581: Reports in the SAP Easy Access Menu

Apart from **transactions** that used to be included in area menus, you can also insert all types of reports that used to be included in report trees directly into area menus. Each report without a transaction code is automatically assigned a new transaction code, which is then inserted into the menu.

Path: *Tools → ABAP Workbench → Development ⇒ Other Tools → Area Menus.*

If you do not want a transaction code generated automatically, you must create it beforehand.

Define Your Own User Menu

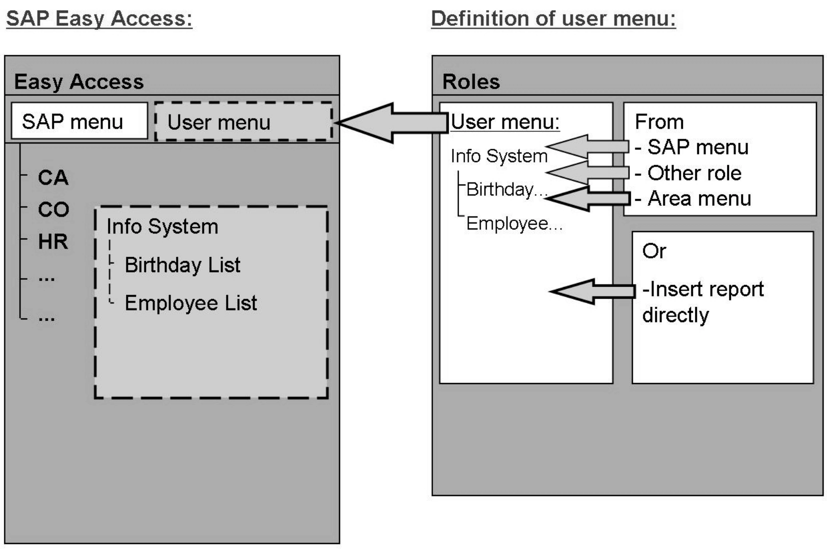


Figure 582: Define Your Own User Menu

To integrate your own reports in a role, perform the following steps:

- Integrating reports directly in the role or via an area menu, for example
- Profile generation
- User assignment

These steps are part of general **role maintenance**. This course merely provides you with an overview of them. You access role maintenance in the SAP Easy Access Menu by choosing *Tools ⇒ Administration ⇒ User Maintenance ⇒ Roles.*

If you require further information on this subject, see the online help for role maintenance or the exercises for this unit.

- **Info systems are integrated with the Easy Access structure as area menus**
- **All HR components have their own info systems**
- **Easy handling with area menu maintenance**

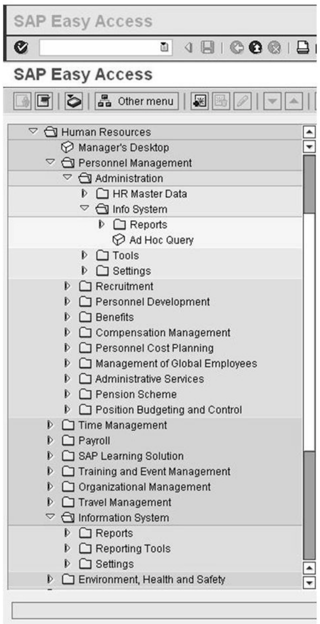


Figure 583: Info Systems in HR

All SAP report trees are integrated into the SAP Easy Access Menu. As a result, the reports of every HR component are accessed via the same menu path:

Human Resources ⇒ <Component> ⇒ Information System ⇒ Reports

To access the entire HR report tree (formerly known as HR00), choose

Human Resources ⇒ Information System → Reports

1005 Exercise 43: Info Systems in the SAP Easy Access Menu

Exercise Duration: 40 Minutes

Exercise Objectives

After completing this exercise, you will be able to:

- Execute reports from the SAP Easy Access Menu
- Create an output list based for example on the "Birthday List" report
- Use the standard output functions
- Define display variants and set initial variants
- Create a new info system and include it in the Easy Access Menu

Business Example

- You are responsible for executing a variety of reports on a regular basis.
- To do so, you use the info systems in the SAP Easy Access Menu.
- You adjust the SAP Easy Access Menu so that it meets your requirements by adding your own reports.

Task 1:

Hint: Use the evaluation period TODAY unless specified otherwise in the exercises.

Executing the Birthday List

You require a list of birthdays for all employees in personnel area **1000/Hamburg.**

1. Create this list by using the ***Birthday List*** report in the **Personnel Administration info system**.
2. Use the filter function to restrict output to **just employees** who were born in **1965**.
3. Use the filter function to restrict output to **only male employees** who were born in **1965**.

Continued on next page

Task 2:

Executing the Employee List

You require a simple list of your employees. You create this list with the report of the same name (***Employee List***) in the **Info system** of **Personnel Administration**. Execute the report in two different ways:

Variant 1: To select persons, use the ***Personnel area*** field (and the appropriate personnel area, **1000/Hamburg**).

Variant 2: To select persons, choose Organizational Structure and the appropriate **organizational unit** in IDES AG (*Exec. Director - Germany → Production and S&D ⇒ Production (D) ⇒ Hamburg Site).*

1. Hide the following columns so they are not included in data output:

   PersIDNo, name at birth, leaving.

2. Once you have hidden these columns, save the layout as **Variant##.**

3. Execute the report again. When the result is output, switch to the **/Variante##** layout you have just defined.

4. Define Variant## as a **default setting.**

5. Execute the report again.

Task 3: Optional

Creating a User Menu/Role

1. Integrate two reports in the single role **T_HR580_AG_##** assigned to you:

   Access role maintenance:

   Tools → Administration ⇒ User Maintenance ⇒ Role Administration ⇒ Roles.

   Enter your role.

   Transfer the following reports or transactions to the role menu:

   - ABAP Report: Employee List (RPLMIT00)

   - SAP Query: **Birthday List** of the **/SAPQUERY/ H2** user group in the **global area**)

   To do so, on the *Menu* tab page choose *Insert Report*.

2. Now **generate** the appropriate authorization profiles: To do so, access the ***Authorizations*** tab page, choose ***Change authorization data***, and then choose ***Generate*** on the following screen.

Continued on next page

Update your authorizations. To do so, access the ***User*** tab page, enter your user name and perform a ***complete user comparison.***

3. In the SAP Easy Access menu, the ***user menu*** is now active and the role is displayed. Call it again to see the new menu structure. Note the new reports in your role.

Solution 43: Info Systems in the SAP Easy Access Menu

Task 1:

Hint: Use the evaluation period TODAY unless specified otherwise in the exercises.

Executing the Birthday List

You require a list of birthdays for all employees in personnel area **1000/Hamburg.**

1. Create this list by using the ***Birthday List*** report in the **Personnel Administration info system**.
   a) In the SAP Easy Access menu, choose

      Human Resources ⇒ Personnel Management ⇒ Administration ⇒ Information System ⇒ Reports ⇒ Employees

      and start the report ***Birthday List***.

      Enter **1000** in the *Personnel Area* field.

      Choose ***Execute***.
2. Use the filter function to restrict output to **just employees** who were born in **1965**.
   a) To select the ***Year*** column, click once on the column header.

      Choose *Edit → Set Filter*.

      In the ***Determine Values for Filter Criteria*** dialog box that appears, enter ***1965*** **in the Year** field (no period selection).

      Choose ***Execute***.
3. Use the filter function to restrict output to **only male employees** who were born in **1965**.
   a) Choose *Edit → Set Filter.*

      In the ***Define Filter Criteria*** dialog box, define the ***Year of birth*** and ***Gender (Gend.)*** fields as filter criteria (copy from right to left).

      Choose ***Transfer***.

      In the ***Filter Criteria*** dialog box, enter **1965** (no period selection) in the ***Year of birth*** field and **1** (male) in the ***Gender*** field.

      Choose ***Execute***.

Continued on next page

Task 2:

Executing the Employee List

You require a simple list of your employees. You create this list with the report of the same name (***Employee List***) in the **Info system** of **Personnel Administration**. Execute the report in two different ways:

Variant 1: To select persons, use the ***Personnel area*** field (and the appropriate personnel area, **1000/Hamburg**).

Variant 2: To select persons, choose Organizational Structure and the appropriate **organizational unit** in IDES AG (*Exec. Director - Germany → Production and S&D ⇒ Production (D) ⇒ Hamburg Site).*

1. Hide the following columns so they are not included in data output:

   PersIDNo, name at birth, leaving.

   a) In the SAP Easy Access menu, choose

      Human Resources ⇒ Personnel Management? Administration ⇒ Information System ⇒ Reports ⇒ Employees ⇒ Employee List

      - **Variant 1:** *Selection via Field*

        In the *Personnel area* field, enter **1000.**

        Choose *Execute*.

      - **Variant 2:** *Selection using organizational structure*

        Choose *Org. structure* (top right pushbutton).

        In the dialog box *Select Organizational Unit* under IDES AG select the organizational unit *Exec. Director - Germany ⇒ Production and S&D ⇒ Production (D) ⇒ Hamburg Site).*

        Choose *Continue*. This takes you back to the selection screen. The *Org structure* pushbutton is now highlighted in a different color. This indicates that you used the pushbutton to make your selection.

        Choose *Execute*.

   b) Position the cursor on the columns *Pers lD No., Name at birth*and *Leaving* or hold down the *CTRL* key and select all three together.

   c) Right-click the columns and choose *Hide* from the context menu.

      (Alternatively, choose *Settings Layout ⇒ Change* to hide all three fields in one step.)

Continued on next page

2. Once you have hidden these columns, save the layout as **Variant##.**

   a) Choose *Settings ⇒ Layout ⇒ Save*.

      In the *Layout* and *Description* fields, enter **/Variant##.**

      Where relevant, select the *User-specific* indicator (and change the name of the layout accordingly).

   b) Choose *Continue.*

   c) Choose *Back.* This takes you back to the selection screen.

3. Execute the report again. When the result is output, switch to the **/Variante##** layout you have just defined.

   a) In the *Personnel area* field, enter **1000.**

      Choose *Execute*.

   b) Choose *Settings ⇒ Layout ⇒ Choose*, and select your */Variant##.*

4. Define Variant## as a **default setting.**

   a) Choose *Settings ⇒ Layout ⇒ Administer*.

      Select your */Variante##* (by using the first column to select the appropriate row).

   b) Choose *Edit → Set Default.*

      Choose *Save.*

      Choose *Back*. This takes you back to the output screen.

      Choose *Back.* This takes you back to the selection screen.

5. Execute the report again.

   a) In the *Personnel area* field, enter **1000.**

   b) Choose *Execute*. When the report is executed, data is automatically output in accordance with the layout you just defined.

Task 3: Optional

Creating a User Menu/Role

1. Integrate two reports in the single role **T_HR580_AG_##** assigned to you:

   Access role maintenance:

   Tools → Administration ⇒ User Maintenance ⇒ Role Administration ⇒ Roles.

   Enter your role.

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Transfer the following reports or transactions to the role menu:

- ABAP Report: Employee List (RPLMIT00)

- SAP Query: **Birthday List** of the **/SAPQUERY/ H2** user group in the **global area**)

To do so, on the *Menu* tab page choose *Insert Report*.

a) In the SAP Easy Access menu, choose

   Tools → Administration ⇒ User Maintenance ⇒ Role Administration ⇒ Roles

b) In the *Role* field, enter **T_HR580_AG_##**.

c) Choose *Change role.*

d) Switch to the *Menu* tab page.

e) Choose *Insert Report*.

f) Select the report type “ABAP Report” and enter the report name **RPLMIT00**.

   Press *Enter*.

g) Choose *Insert Report* again.

h) Select the report type “SAP Query”, select “Globaler Area”, enter user group “/SAPQuery/H2” and choose the query “Birthday list”. Press *Enter*.

i) Choose *Save*. Confirm any messages output by pressing *Enter*.

2. Now **generate** the appropriate authorization profiles: To do so, access the ***Authorizations*** tab page, choose ***Change authorization data***, and then choose ***Generate*** on the following screen.

Continued on next page

Update your authorizations. To do so, access the ***User*** tab page, enter your user name and perform a ***complete user comparison.***

a) Switch to the *Authorizations* tab page (which still contains a red traffic light).

b) Choose *Change authorization data* (pushbutton).

c) Choose *Save* and *Generate.* Accept the default names proposed for the profile and text.

d) Choose *Back*. The traffic light on the *Authorizations* tab page is now green. The traffic light on the *User* tab page is red because the profile you just created has not yet been compared with the assigned users.

e) Switch to the *User* tab page.

f) Enter your *user ID*.

g) Choose *User compare* (pushbutton).

h) In the *Compare User Master Record of Role* dialog box, choose *Complete compare.* Confirm any information messages output with *Yes*.

i) Choose *Back.* This takes you back to the selection screen.

3. In the SAP Easy Access menu, the ***user menu*** is now active and the role is displayed. Call it again to see the new menu structure. Note the new reports in your role.

a) Choose *User Menu/SAP Menu* to switch from one menu to another.

b) To test, choose *User menu* and check the two new reports added.

Lesson Summary

You should now be able to:

- Execute reports from the SAP Easy Access Menu
- Create new info systems, and adapt existing info menus so that they meet your requirements

Unit Summary

You should now be able to:

- Execute reports from the SAP Easy Access Menu
- Create new info systems, and adapt existing info menus so that they meet your requirements

Unit 36

1015

Logical Databases and InfoSets

For more information, see the Instructor Guide in SAPNet.

Unit Overview

At the conclusion of this unit, you will be able to:

- Explain the importance of logical databases, InfoSets and user groups
- List the functions of the logical databases PNP/PNPCE, PCH, and PAP
- Create InfoSets and field groups

Unit Objectives

After completing this unit, you will be able to:

- Explain the importance of logical databases, InfoSets and user groups
- List the functions of the logical databases PNP/PNPCE, PCH, and PAP
- Create infoSets and field groups

Unit Contents

Lesson: Logical Databases, InfoSets, and User Groups

1016

Lesson Duration: 40 Minutes

Lesson Overview

Explain logical databases, InfoSets, and user groups

Lesson Objectives

After completing this lesson, you will be able to:

- Explain the importance of logical databases, InfoSets and user groups
- List the functions of the logical databases PNP/PNPCE, PCH, and PAP

For more information, see the Instructor Guide in SAPNet.

Business Example

- You need various reports to present to the Board that are not covered by standard reports.
- It is your task to generate these reports in the form of queries.
- You want to take advantage of the possibilities offered by the logical databases in HR.

Logical Databases, InfoSets, and User Groups

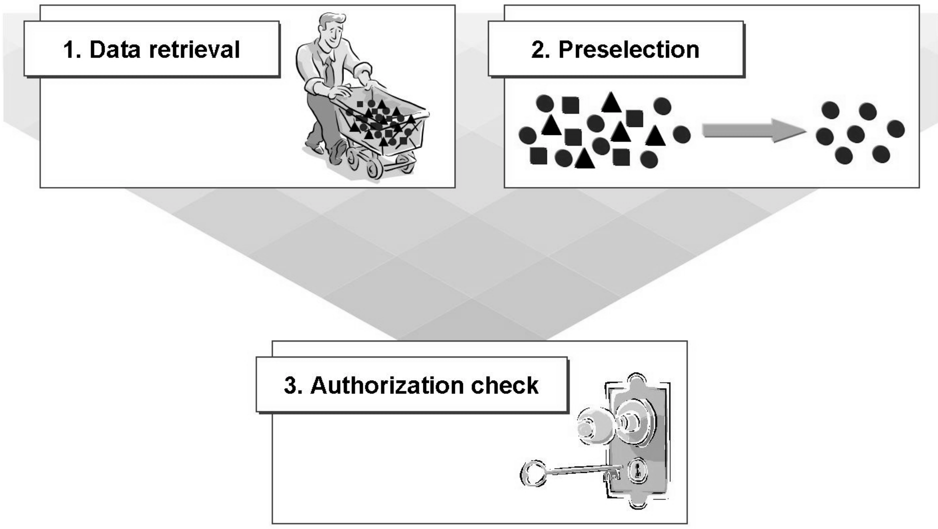


Figure 584: The functions of logical databases

Logical databases are special ABAP programs that provide data for processing by queries or programs. Logical databases provide a particular view of the database tables in the SAP System.

Logical databases can perform the following tasks:

1. **Data Retrieval**:

   Personal data for each employee is loaded into the main memory, where it is available for processing.

2. **Selection Screen:**

   On a selection screen, you can select employees according to organizational criteria, for example all hourly wage earners in a particular part of the enterprise.

3. **Authorization Check:**

   The system checks whether the user starting a report is authorized to view the data in the report.

In addition, performance improvements in logical databases are passed on to all related programs and queries, without them needing to be changed themselves.

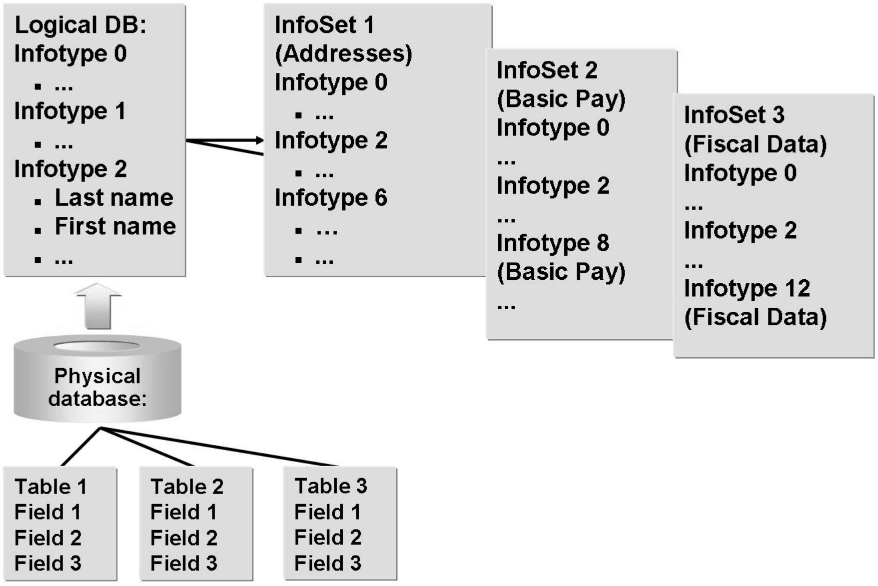


Figure 585: Logical Databases and InfoSets

InfoSets are special **views of logical databases.** An InfoSet determines which fields of a logical database can be reported on by queries. InfoSets are assigned to **user groups.** InfoSets are structured according to field groups. **Field groups** in HR correspond to **infotypes.**

Each logical database has a **standard selection screen** that is determined by the structure of the logical database. Irrespective of the structure of the database tables that are used, the selection screen contains the selection parameters that are most frequently used. When you define reports with logical databases, you are seldom required to select selection fields explicitly because they are included in the standard selection screen.

Another method of acquiring an overview of the selection parameters of a logical database consists of defining and executing a query with the logical database. All of the selection parameters are included in the selection screen. If a large number of parameters is available, you can also display them by choosing *Further selections*.

Customer infotypes (namespace 9000-9999) can be included in InfoSets created for HR components.

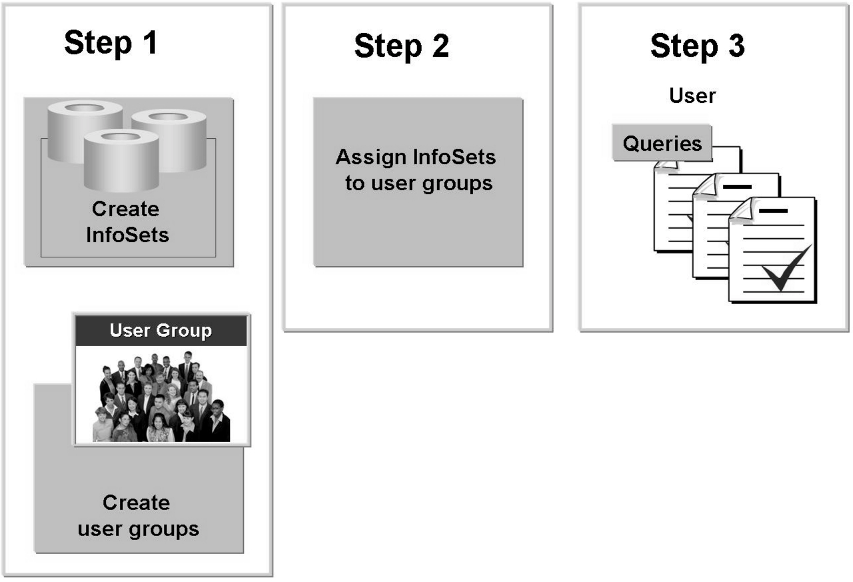


Figure 586: InfoSets and User Groups

InfoSets are only available to users if the users have been assigned to **user groups.**

The prerequisites for working with Ad Hoc Query and SAP Query are:

1. You have created InfoSets and user groups
2. You have assigned InfoSets to user groups
3. Users can now create queries.

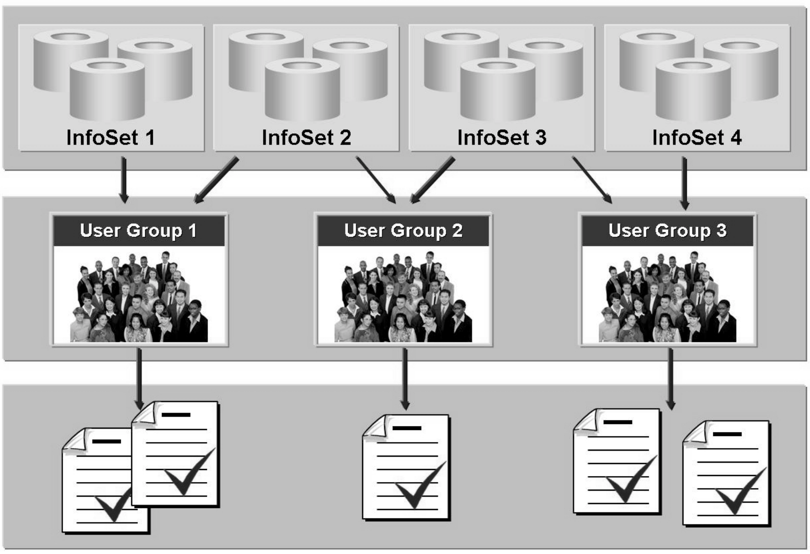


Figure 587: Assign InfoSets to User Groups

To set up an appropriate working environment for end users, the system administrator maintains user groups. **Users** who work in the same application are grouped together in user groups.

It does not matter which users within a user group actually defined its queries. They can be executed by every user assigned to this user group.

However, users assigned to a user group can only change and redefine queries if they have the appropriate authorization to do so.

Queries that belong to other user groups cannot be changed, but they can be copied and executed.

Every user can be assigned to more than one user group.

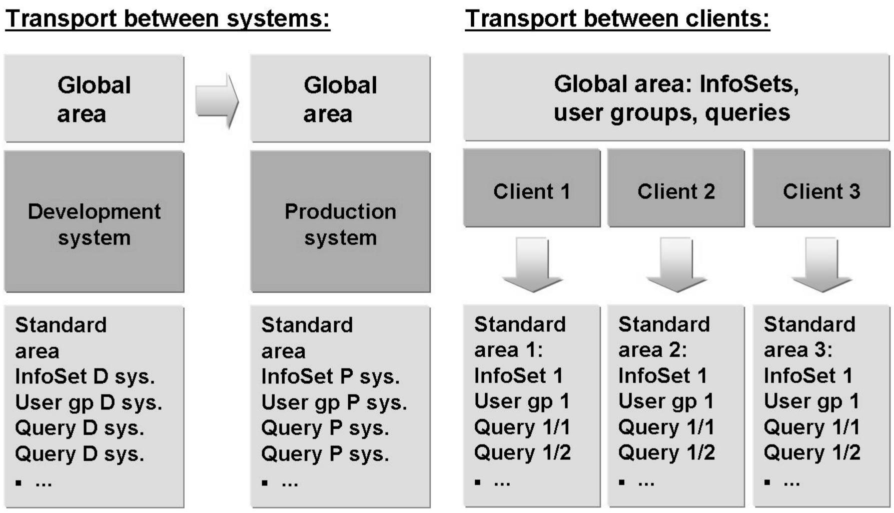


Figure 588: Global and Standard Query Area

A distinction is made between two **query areas**, the *standard query area* and the *global query area.*

Standard query area:

- In the standard query area, all query objects (queries, InfoSets, user groups) are created and managed per client. Query objects are not linked to the Workbench Organizer, which means they cannot be entered and transported using customary correction and transport procedures. The advantage of this query area is that it enables end users to develop queries in their clients which are not intended for system-wide use.

Global area:

- Query objects in the global query area are cross-client.

  They are available throughout the entire system, that is, in all clients. Query objects in the global query area are linked to the Workbench Organizer. They can be entered and transported using customary correction and transport procedures.

- You are not required to perform any activities either before or after transports. For this reason, the global query area is suitable for queries that must be developed and distributed as centrally usable objects. Query objects delivered by SAP as of Release 4.0 are also stored in this area.

Global area		Standard area
Transport user groups Options: replace/merge	→	User groups Possible subsequent activities: • Assign InfoSets • Assign queries
Transport InfoSets Options: replace/group/merge/ unassign	→	InfoSets Possible subsequent activities: • Assign user groups
Transport InfoSets and queries Options: replace/group/merge/unassign	→	InfoSets and queries Possible subsequent activities: • Assign user groups
Transport queries and user groups	→	Queries (user groups) Possible subsequent activities: • Assign user groups

Figure 589: Transports from the Global Area

The transactions used to maintain query objects check the name syntax. You are only allowed to use name prefixes for query objects in the global query area. This is important because SAP query objects could be imported into this area when the system is upgraded. Query objects provided by SAP use the reserved name prefix “/SAPQUERY/”.

If you need to create queries in a user group whose prefix belongs to SAP, a partner, or another R/3 customer, you must take careful note of the fact that queries inherit their user group's prefix. Such user groups could end up in the system after a release upgrade or transport has been performed. The query then constitutes part of the objects that are assigned to the namespace specified by the user group's prefix.

Logical databases in HR

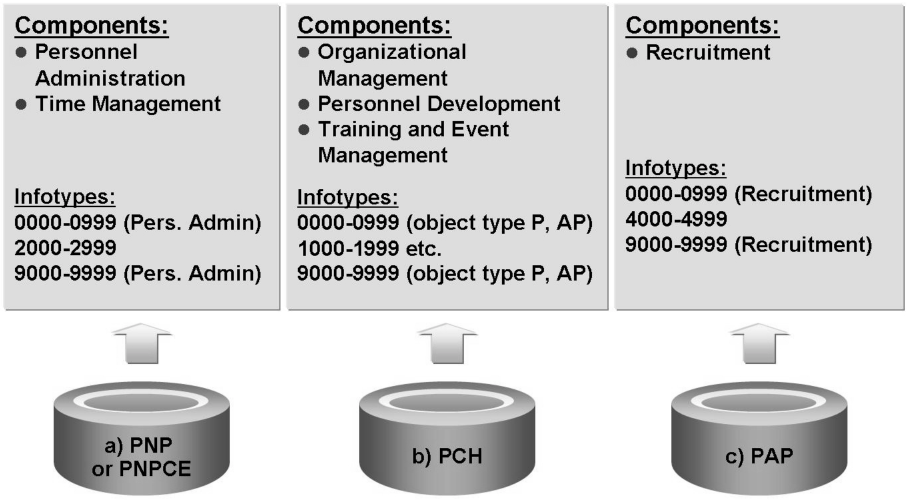


Figure 590: Logical Databases in HR

The system includes three logical databases - PNPCE (will eventually replace PNP), PCH, and PAP - that enable you to create InfoSets for HR. The logical database you need to use when creating an InfoSet is determined by the HR components on which you need to report.

The following assignments between components and logical databases apply:

- HR-Administration: PNP or PNPCE
- Time Management: PNP or PNPCE
- Payroll PNP or PNPCE
- Recruitment: PAP
- Personnel Development: PCH
- Organizational Management: PCH
- Training and Event Management: PCH

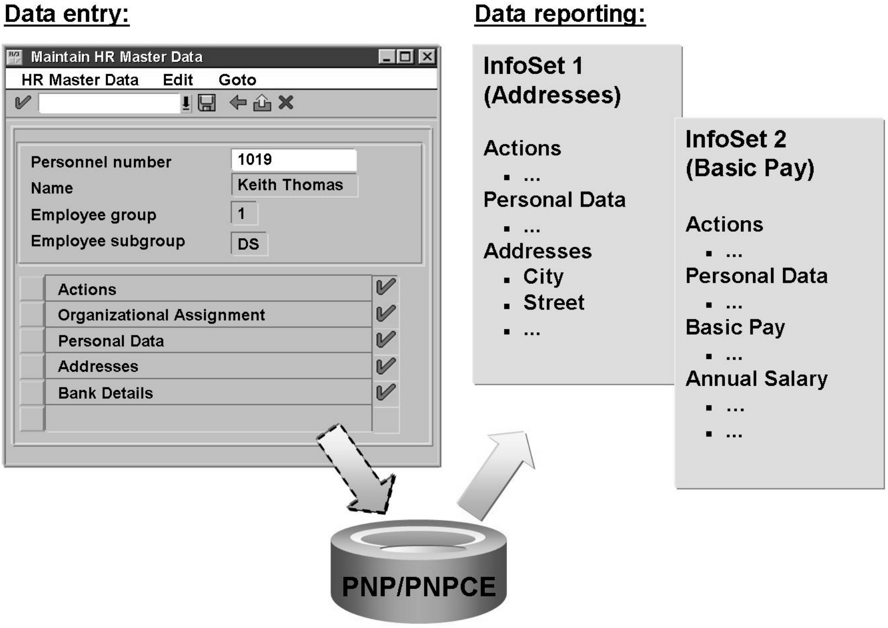


Figure 591: a) The New Logical Database PNPCE

As of *SAP R/3 Enterprise Core 4.70 (SAP_HR 470)* there is a **new logical database PNPCE** that is intended to eventually replace the logical database PNP.

The **new features** of logical database PNPCE compared with PNPCE mainly fall into two categories:

- Unlike the logical database PNP, the logical database PNPCE can be used with **Concurrent Employment**. For more information about Concurrent Employment, see note 517071.
- The logical database PNPCE contains the following **enhancements** and new features that are not contained in the logical database PNP:
  - Customizable list box for setting the reporting period that is intuitive and easy to use.
  - Individual specification of person selection period and data selection period has been simplified.
  - Integration of reporting period and payroll period on one screen (no screen change required).
  - Clearly-structured selection screen with all pushbuttons in the general application toolbar.
  - Clearly-structured in-place display of dynamic selection options (optionally as a dialog box, as with PNP).
  - Support for selection IDs when selecting personnel numbers.

These general functional enhancements can be used independent of the Concurrent Employment concept. For this reason, it is recommended to use the logical database **PNPCE** for all **new developments**. The logical database PNP will continue to be supported.

If you want to report on data from the ***Personnel Administration, Payroll***, or ***Time Management*** components, use logical database **PNPCE** to create InfoSets. **In older releases,** you can import the Query Generator with the help of notes and Support Packages (4.6C: note 305118; 4.6B: note 187767; 4.5B: note 153684).

You can find detailed documentation in the SAP Service Marketplace under the quicklink: */HR → Services for mySAP HR → Special Documentation.*

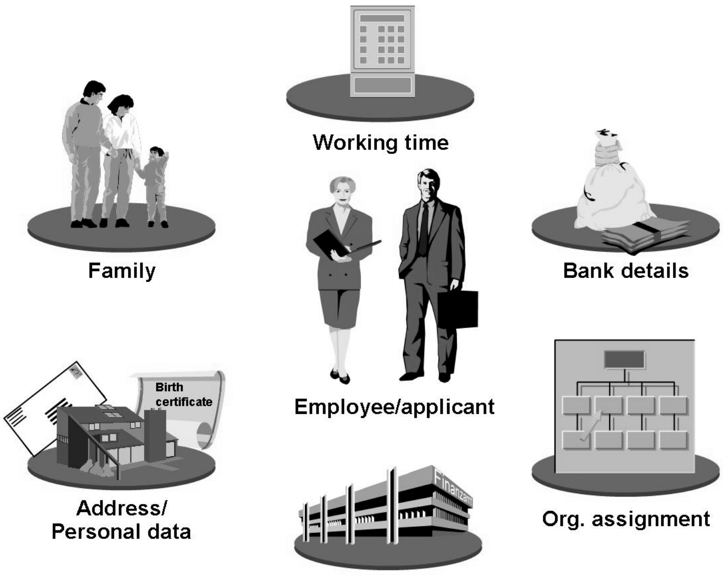


Figure 592: Data Model Personnel Administration and Recruitment

Infotypes are units of information in HR. Infotypes group together coherent data fields.

They are a way of structuring the information that is reported on by reports or queries.

To preserve the **history** of infotypes, the system saves them in time-specific records. For each infotype record the system records a validity period. Usually, therefore, there are several data records for each of an employee's infotypes.The records are distinguished by their differing validity periods.

Using a **time constraint**, you specify how the data records of an infotype react to each other over time:

- *Time constraint 1*: For the whole time an employee belongs to the enterprise, there must be exactly one valid data record of a particular infotype.
- *Time constraint 2*: At any particular point in time there can be at most one valid data record of a particular infotype.
- *Time constraint 3*: At any particular point in time there can be unlimited valid data records of a particular infotype.

For a personnel or applicant number to exist, the infotypes *Actions* (0000), *Organizational Assignment* (0001), *Personal Data* (0002), and *Payroll Status* (0003) must be in existence.

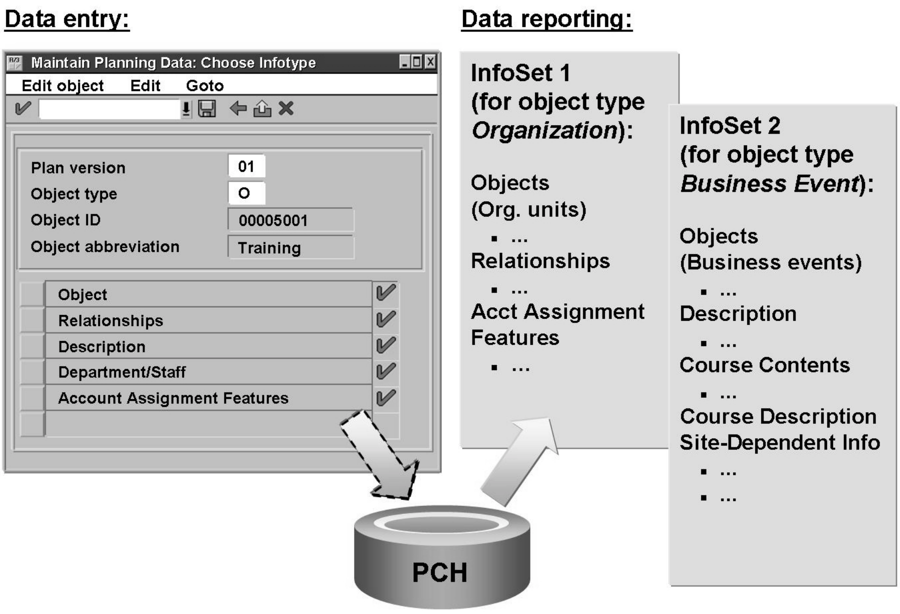


Figure 593: b) Logical Database PCH

If you want to report on data from the following components:

- ***Organizational Management***
- ***Personnel Cost Planning***
- ***Training and Event Managament***
- ***Personnel Development***

use logical database **PCH**.

If you create InfoSets using logical database PCH, note that you can restrict the InfoSet using an object type.

The InfoSet can only be used for Ad Hoc Query if it has been **restricted using an object type.** In this instance, the system only allows you to select infotypes that are relevant to the selected object type.

If you do not restrict the InfoSet using an object type, the system allows you to select all of the infotypes available in logical database PCH.

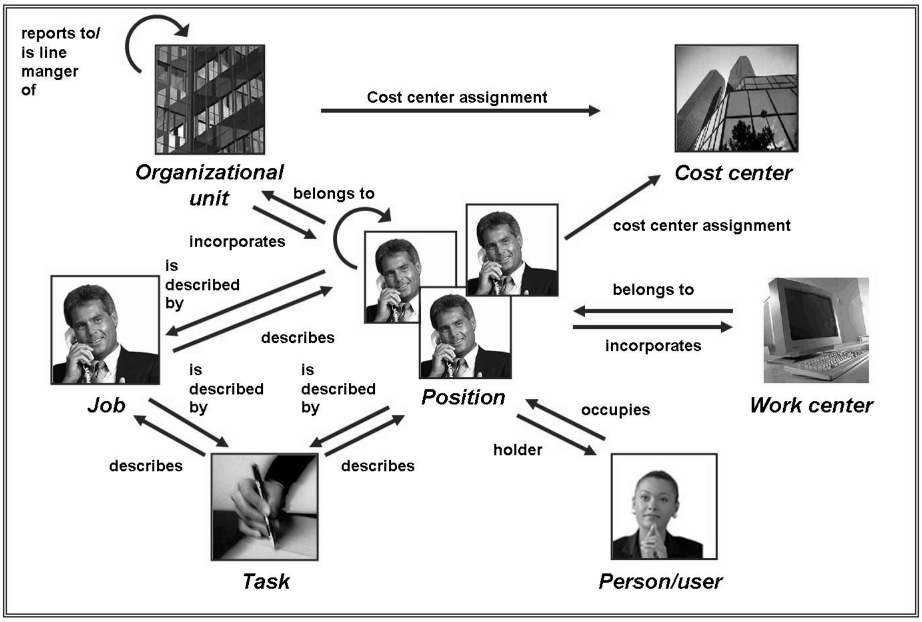


Figure 594: Data Model Personnel Planning

Organizational Management is based on the concept that each element in an organization is depicted as an independent object with individual characteristics. These objects were individually created and maintained. Then they are connected to each other using relationships (see above). This creates a network whose flexibility enables you to carry out personnel planning, previews, and reports.

Since cost centers are not maintained in Organizational Management, they are an external object type.

In Customizing you can enhance the existing data model by - for example - defining new object types and allowing new relationships between object types. Each standard object type name consists of two letters. The customer namespace is 00 to 99.

This data model (object types and relationships) is also the foundation for other personnel planning applications, such as Training and Event Management (business event hierarchies), Personnel Development (qualifications catalog and so on).

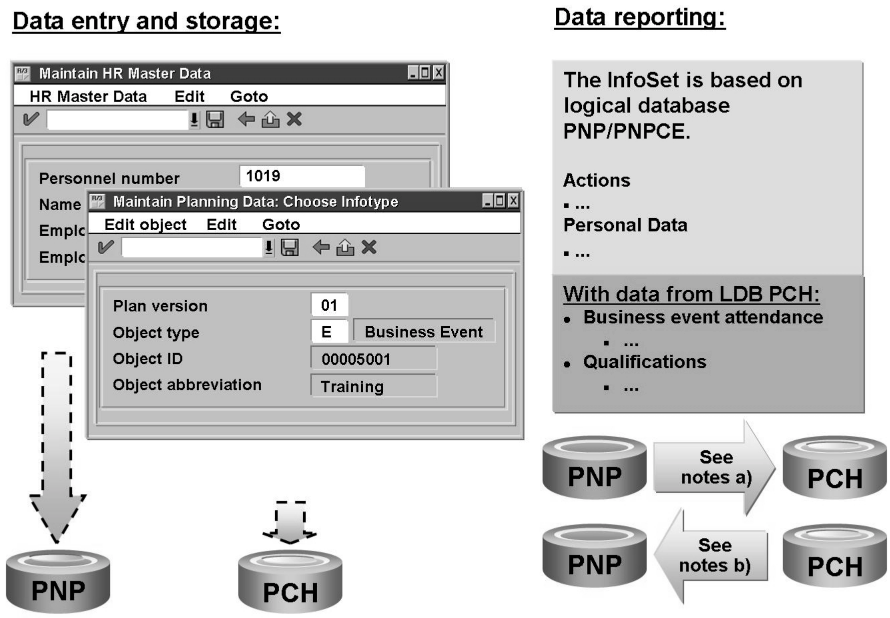


Figure 595: Reporting on Data From PNP/PNPCE and PCH

An InfoSet can only be based on *one* logical database. For this reason, you can only select one logical database to create an InfoSet.

The following situations can arise for logical databases PNP and PCH. They require you to decide which logical database to use to create a corresponding InfoSet.

- a) You want to output data from **infotypes 0-999** and data from **some infotypes from the PCH database** , e.g. *Personnel Development* or *Training and Event Management* infotypes:

  In this case, you must work with the logical database **PNP/PNPCE** . If you create an InfoSet using logical database PNP/PNPCE, you can also include infotypes from logical database PCH in the InfoSet.

- b) You want to report on **all** HR master data infotypes:

  In this case, you must work with the logical database **PCH**. When you create the Infoset, do not select an object type (in which case you can only work with SAP Query) or select the object type P (Person) or S (position).

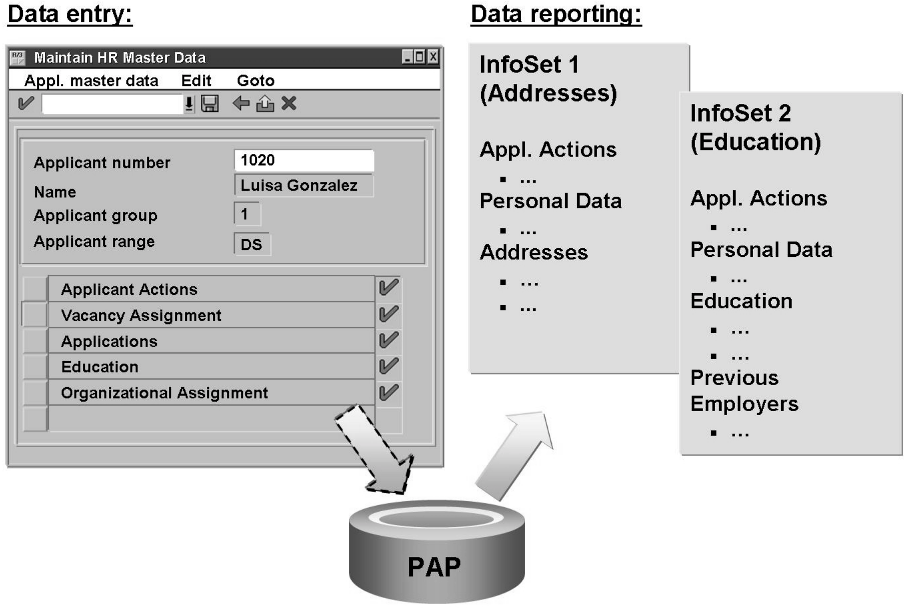


Figure 596: c) Logical Database PAP

If you want to report on data from the ***Recruitment*** component, use logical database PAP to create InfoSets. If you select logical database PAP to create an InfoSet, the system automatically provides you with an appropriate selection of relevant infotypes.

Facilitated Discussion

Discussion Questions

Use the following questions to engage the participants in the discussion. Feel free to use your own additional questions.

Lesson Summary

You should now be able to:

- Explain the importance of logical databases, InfoSets and user groups
- List the functions of the logical databases PNP/PNPCE, PCH, and PAP

Lesson: Creating and Changing InfoSets

1030

Lesson Duration: 40 Minutes

Lesson Overview

In this lesson, you learn how to create and change InfoSets.

Lesson Objectives

After completing this lesson, you will be able to:

- Create infoSets and field groups

For more information, see the Instructor Guide in SAPNet.

Business Example

Once you have familiarized yourself with the basic technical terms, you want to define InfoSets. These should contain the fields you require for your queries.

Procedure for Creating InfoSets

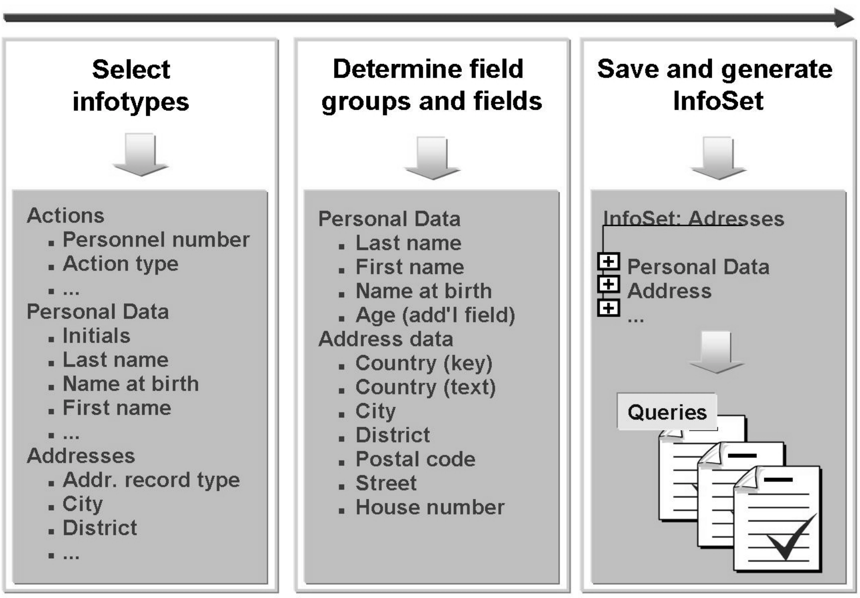


Figure 597: Procedure for Creating and Changing InfoSets

To **create InfoSets**, perform the following steps:

1. Select a **logical database** depending on the components used and the purpose of the InfoSet.

   (applies to PCH only): if the InfoSet is intended for Ad Hoc Query, select the required object type.

2. Select the relevant **infotypes**.

   For additional information on which infotypes are used for which components, see *HR Infotypes* manual.

3. Activate or deactivate other **fields** (in the standard system, all infotype-specific fields and the most important additional fields are active). You are advised to avoid creating unnecessarily large InfoSets. This makes them easier to use. You can reactivate fields and include more infotypes at any time.
4. Rename **field groups** if necessary.
5. **Save**and **generate** InfoSet.
6. As soon as you have generated the InfoSet, assign it to a **user group** and perform a test to ensure that the InfoSet is complete.

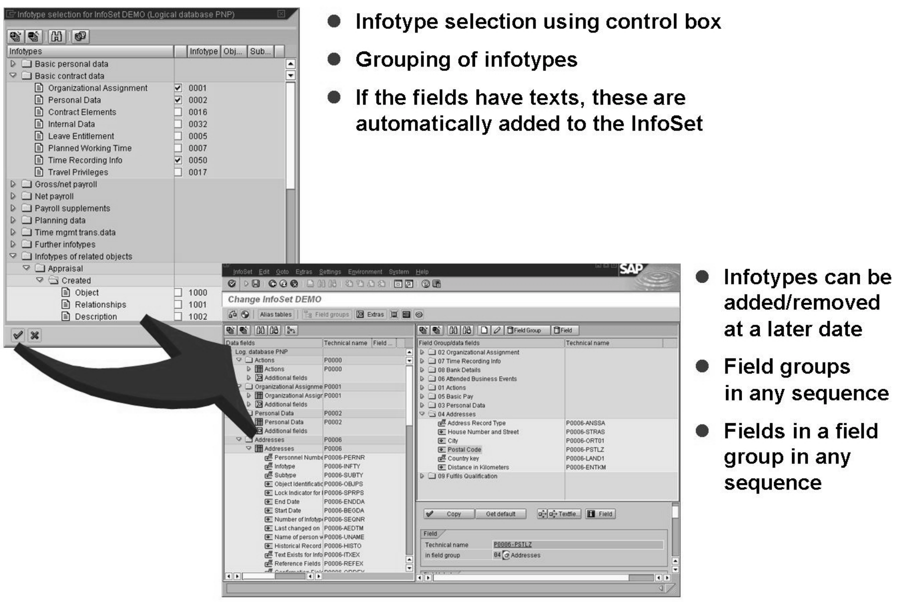


Figure 598: Initial Maintenance Screen for Reporting on Persons/ Applicants

The maintenance interface for InfoSets is set up as follows:

- You select the infotypes for an InfoSet using checkboxes in a Tree Control.
- If an InfoSet is created through HR Master Data (logical database PNP/PNPCE), the HR infotypes are grouped according to the user group selected (which you can set under *User Groups → Change View*). You can select Personnel Planning *objects and their related infotypes* from the list of allowed relationships in the group Infotypes of Related Objects.
- You can modify the order of the field groups in an InfoSet and the order of the fields in a field group if you need to. You can change the names of fields and field groups. The InfoSet is displayed in the InfoSet Query exactly as you created it.
- You can change the selection of infotypes in an InfoSet at a later date if required. You can add or remove infotypes later. You can only remove an infotype if none of the fields is used in a query.

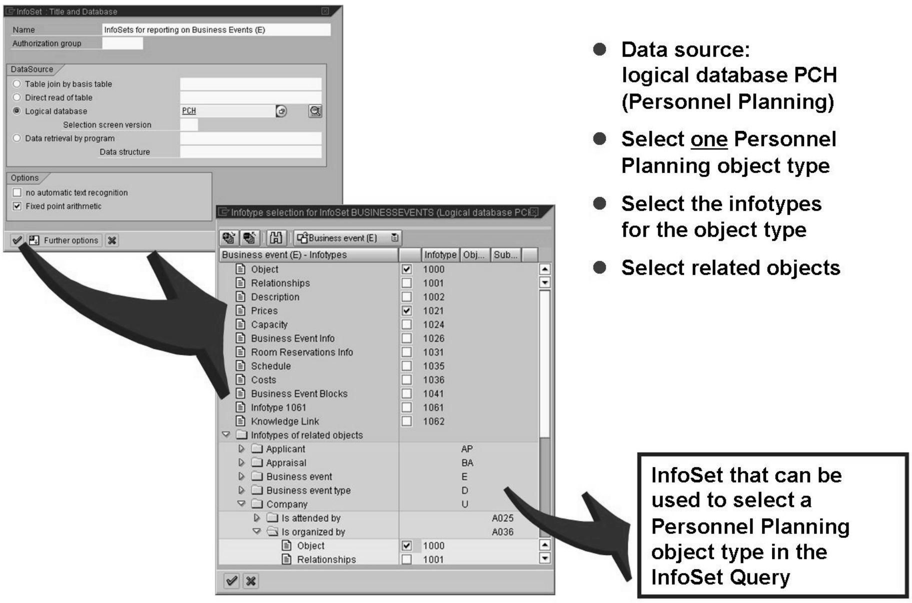


Figure 599: Initial Maintenance Screen for Reporting on Personnel Planning Objects

If you use the **logical database PCH** to create an InfoSet that you can use to select objects in the InfoSet Query, you must start by specifying an object type.

When you have selected the object type, the infotypes allowed for the object type are available for selection. Additionally, under *Infotypes of Related Objects*, all object types are listed that can be related with the object type you selected. On the next level of the tree display, all relationships are listed that may exist between the object type you selected and object types you can select. On the lowest level, all infotypes of the specified object type are displayed.

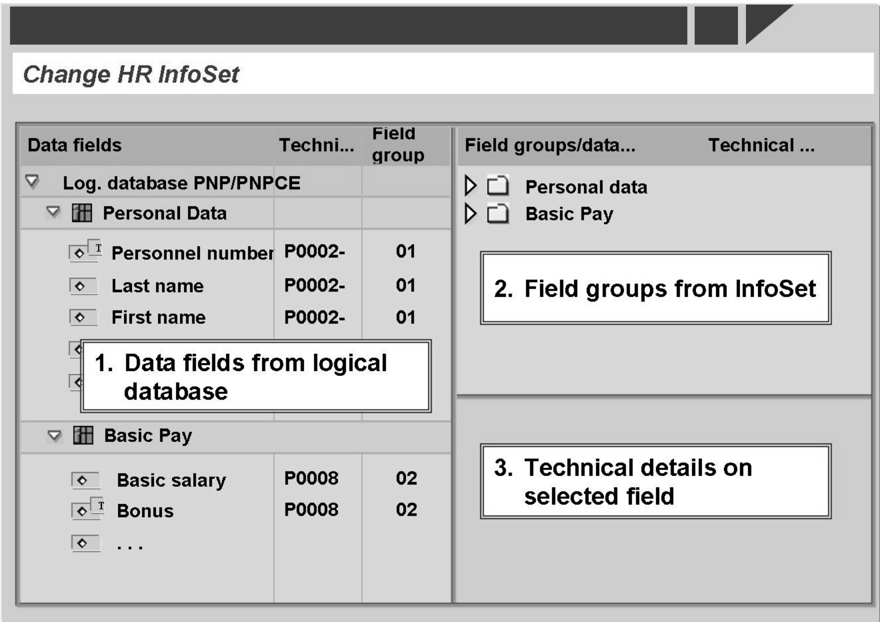


Figure 600: Maintenance Interface for HR InfoSets

The InfoSet maintenance interface is divided into three sections. The whole of the left hand side is devoted to **data field management** in a tree structure. At the top right, another tree structure enables **field group management**. If you double-click on a field for detailed processing, **details** of the field are displayed at the bottom right of the screen.

The **data fields** are displayed in two different formats: with or without a text field. With text field means that the system has found a text for this field, for example in another table. The link is found via a foreign key specified in the dictionary. When you are processing a query, you can specify in the settings whether the system should output the value of the data field or of the text field.

To see a contextual menu of **functions** for the nodes in the tree structure, right-click an object. You can, for example, assign a data field to a field group by right-clicking the desired field group. In the query, you can only select fields that you have assigned to a field group.

The New Logical Database PNPCE

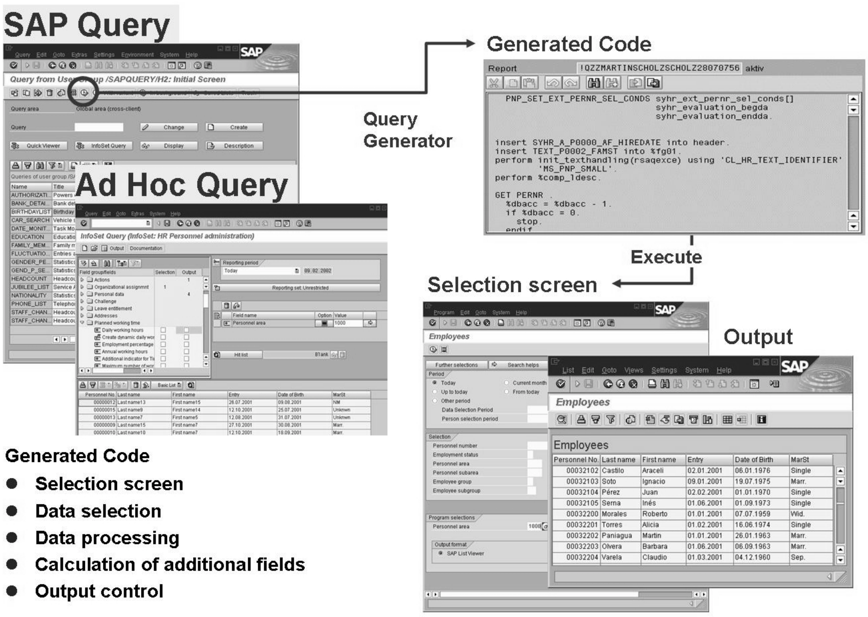


Figure 601: The New Query Generator of the Logical Database PNPCE

When you use generic reporting tools such as SAP Query and the InfoSet query, the source code is generated automatically by means of a query generator. The source code generated in this way is regulated by two main elements, namely the generation logic of the query generator and query definition.

As of SAP R/3 Enterprise Core 4.70 (SAP_HR 470), the new query generator is available in SAP Query for the logical databases of HR. In addition to the functions available so far, you can now configure the query logic at InfoSet level. This give you more flexibility when you want to define queries to meet different requirements.

You make the settings using switches, which the query generator processes. We distinguish between general switches and infotype-specific switches (see next slide for details).

- General switches control the settings that are valid for the InfoSet as a whole.
- Infotype-specific switches control settings that can be defined for each infotype.

For detailed information about the switches and how they are used, see the corresponding Customizing activity Create InfoSets for HR. You access these Customizing activities by choosing *Human Resources ⇒ Human Resources Information System → HR Settings for SAP Query ⇒ Create InfoSets for HR*.

General Switches and Infotype-Specific Switches

- A query generator generates the source code automatically
- For business reasons, it may make sense to make logic-specific settings for an infotype using
  - general switches: valid for each InfoSet
  - infotype-specific switches: apply to each infotype (in this InfoSet)

General switches:

- BL_ALLOW-DUP_Lines - outputs identical (double) lines in the basic list
- REPORT_CLASS - Set up report category (PNP and PNPCE)
- PROCESS_LOCKED_RECORDS - Process locked data records (PNP and PNPCE)
- PROC_PERNR_PARTIAL_AUT - Process persons for which only partial authorization is available (PNP and PNPCE)
- PERSON_ONLY_ONCE - Process each person once only (PNPCE)

Infotype-specific switches:

- LAST_RECORD_ONLY - Process last data record only
- PROVIDE - Merge neighboring/overlapping data records
- PROVIDE_FIELD - Relevant fields for merging data records
- PRIMARY_INFTY - Infotype relationship to primary infotype (infotype views)
- TIME_DEPENDENCE - Time dependence
- DATA_REQUIRED - Existence of data records required
- SPLIT_DATA_REQUIRED - Existence of data records required in split period
- NO_INDIRECT_EVALUATION - Indirectly reported wage types are not calculated
- IGNORE_WAGE_TYPE_OPERA - Ignore operation indicators(for deduction wage types)
- NO_DUPLICATE_LANGU - Output data records in one language only
- CASE_SENSITIVE_SEL - Case-sensitive selection
- ADD_FIELDS_SPLIT_DEP - HR additional fields considered split-dependent
- SPLIT_DEPENDENT_AF - Technical name of an HR additional field that is split-dependent
- SPLIT_INDEPENDENT_AF - Technical name of an HR additional field that is split-independent

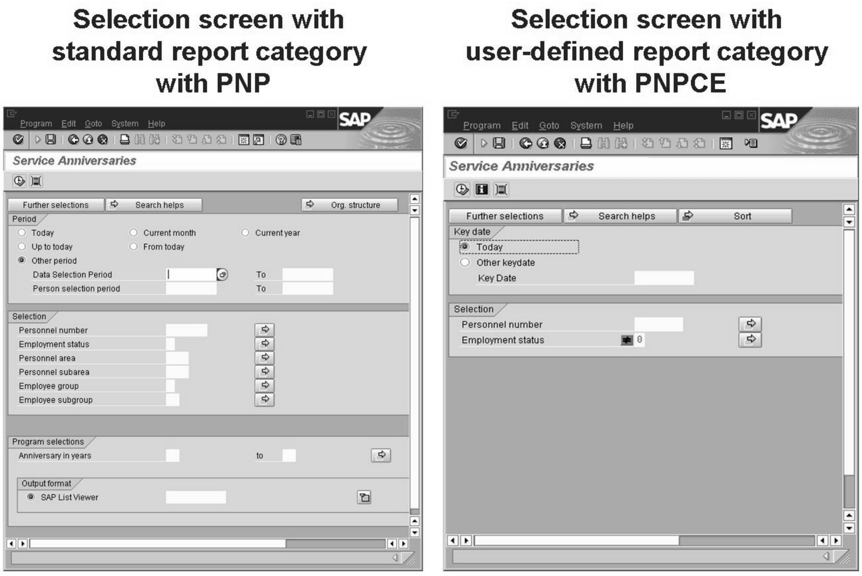


Figure 602: General Switch Example: Set Up Report Category

REPORT_CLASS - Set Up Report Category (PNP and PNPCE)

Description - There is a report category concept for the logical databases PNP and PNCPE that allows you to control the structure of the selection screen. Any report that is based on one of these two logical databases can be assigned to a specific report category. You maintain report classes in Customizing under *Personnel Management → Human Resources Information System → Reporting → Adjust Standard Selection Screen → Create Report Classes*. Every query is a generated report, therefore, you can assign report categories to queries. A default report category is assigned as standard. The switch REPORT_CLASS enables you to define a specifc report category.

Standard behavior: If the InfoSet is based on the logical database PNP, the report category ___X2001 is used. If this report category does not exist, the report category ___22002 is used instead. If the InfoSet is based on the logical database PNPCE, the report category QUEPNPCE is used.

Values: You can use both SAP and customer-specific report categories. Due to the fact that PNP and PNPCE use different report categories, it is important that the report category you enter was created for the logical database used in the InfoSet.

Note:

- Report categories are only supported by the logical databases PNP and PNPCE. The switch cannot be used for InfoSets that are based on a different logical database.
- The Ad Hoc Query does not use the selection screen of the logical database to define the selection conditions. Therefore, specification of a report category in Ad Hoc Query has no obvious affect.

Example:

- *HR [COMMON]
- *HR REPORT_CLASS = “PNPCEALL”

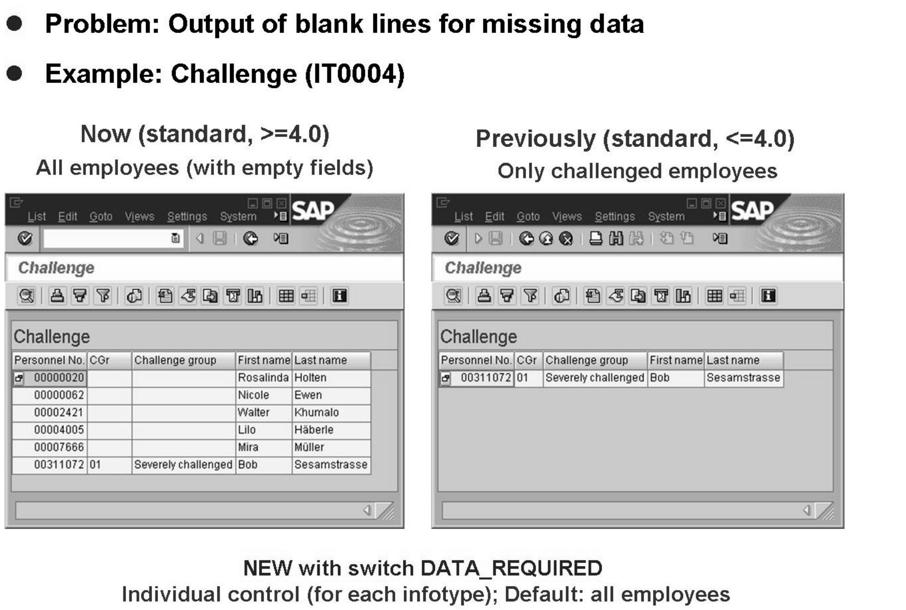


Figure 603: Infotype-Specific Switch: Existence of Data Records Required

DATA_REQUIRED - Existence of data records required

Description: Data does not always exist for all infotypes that are output in a query. By default, queries display initial values (blanks) for persons or objects for which no data records exist. A possible alternative is not to display persons or objects for which no data records exist. The switch DATA_REQUIRED enables you to do this. If the switch is activated, a person or object is only displayed if at least one data record exists for them in the evaluation period.

Standard behavior: As of Release 4.0 all persons and objects that fulfill the selection conditions are displayed. If no data record exists for an infotype in the evaluation period, the appropriate fields are displayed empty (with initial values). Before Release 4.0, the default was that only persons were displayed for whom data records existed.

Values:

- “X”# Only persons and objects are displayed for which at least one data record exists in the evaluation period.
- “ ” #Standard: All persons and objects are displayed (that fulfill the selection conditions). If no data records exist for one of these persons or objects, the initial values are displayed.

Note: A similar switch exists, SPLIT_DATA_REQUIRED, which gives you even more control.

Example:

*HR [P0004]

*HR DATA_REQUIRED = “X”

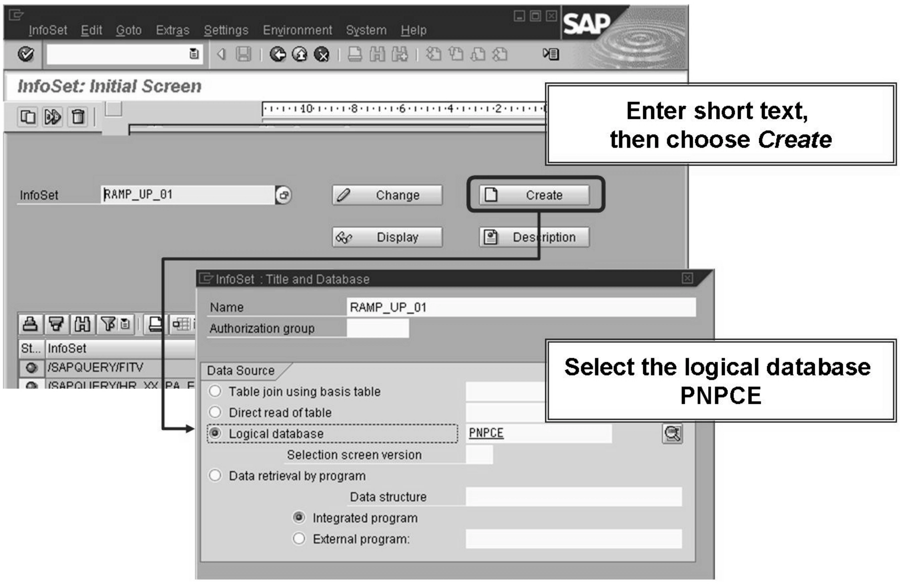


Figure 604: Using Switches in InfoSets: Step 1

Make InfoSet-specific settings in the following way:

- On the Change InfoSet <Name of InfoSet> screen, choose *Goto → Source Code → Data*.
- In the right screen area, (coding tab/coding section DATA) enter the switch and the value for the setting you require.

See the documentation in the Implementation Guide (IMG) under *HR Settings for SAP Query → Create InfoSets for HR.*

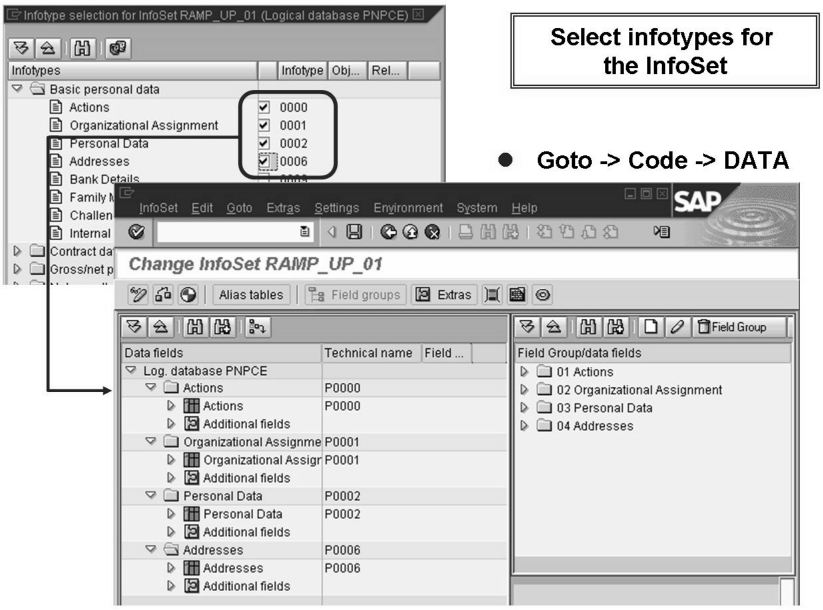


Figure 605: Using Switches in InfoSets: Step 2

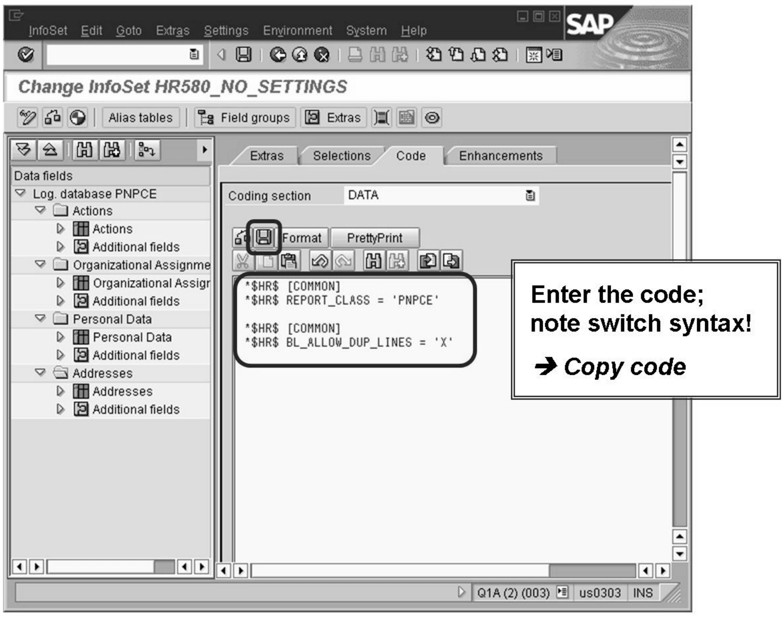


Figure 606: Using Switches in InfoSets: Step 3

Note the following syntax:

- General switches:
  - *HR [COMMON]
  - *HR NAME_OF_SWITCH = “VALUE”
- Infotype-specific switches (NNNN,MMMM = infotype number):
  - Definition of an infotype:

    *HR [PNNNN]

    *HR NAME_OF_SWITCH = “VALUE”
  - Specification of different infotypes:

    *HR [P0000, P0004, P0006]
  - Specification of an area:

    *HR [P0006 # P0009]
  - Templates/placeholders (“+” for one character, “*” for a character string):

    *HR [P00++]

    HR [P]

    HR [P0+1]

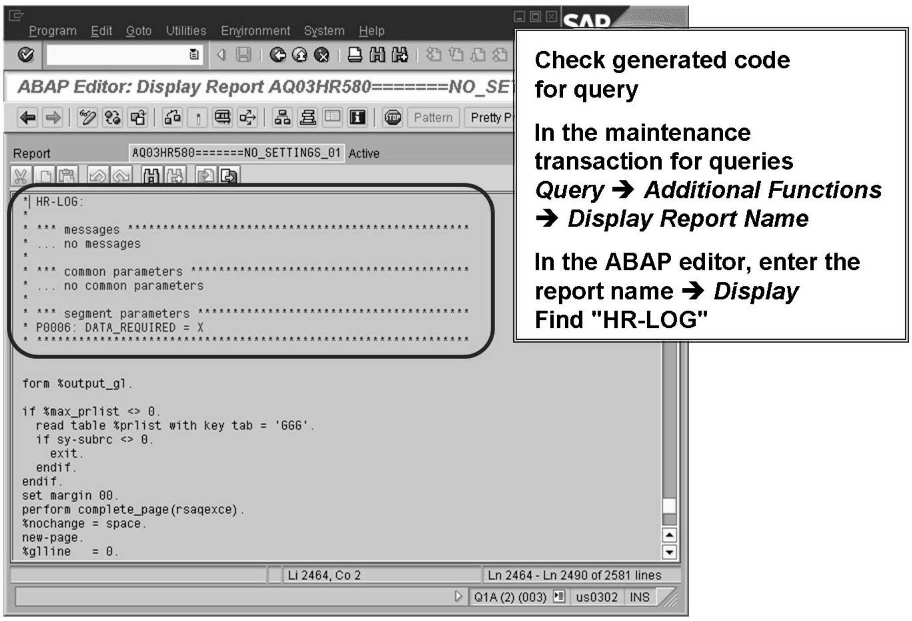


Figure 607: Using Switches in InfoSets: Step 4

Other Functions

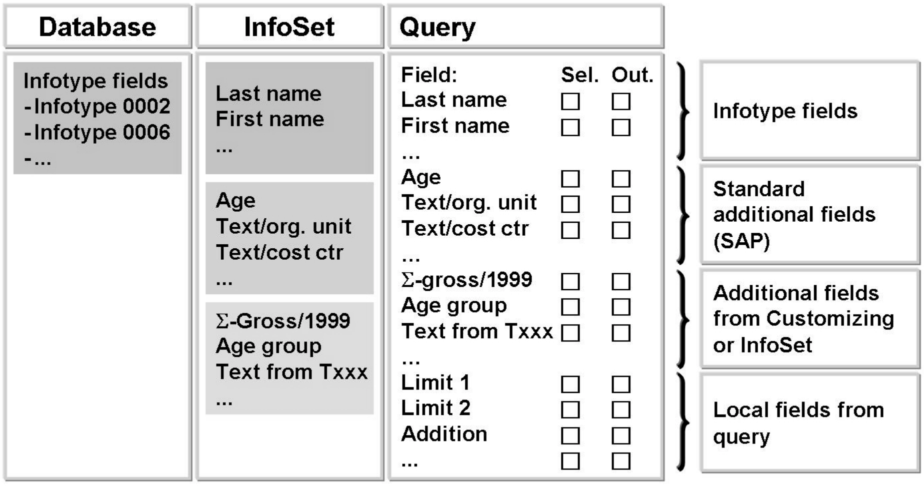


Figure 608: Additional Fields and Local Fields

The term **additional fields** covers all of the fields that do not exist in the database table of the corresponding infotype, but that are available for reporting purposes.

- **Standard additional fields** are additional fields that are required by the majority of customers, as experience has shown. For this reason, they are available in the standard system when InfoSets are created.
- Additional fields can also be defined by **customers** to meet special, company-specific requirements. They can be created in HR Customizing, or when an InfoSet is created. When they have been created in Customizing (under *HR Settings for SAPQuery ⇒ Additional Information for Maintaining InfoSets (Functional Areas) ⇒ Define Additional Fields*), they are always available when InfoSets are created. If they are created in an InfoSet, they are only available in that particular InfoSet.

Just like additional fields, **local fields** are used to meet specific requirements. They are defined within a query, and are only available for that query (for instance, in SAP Query).

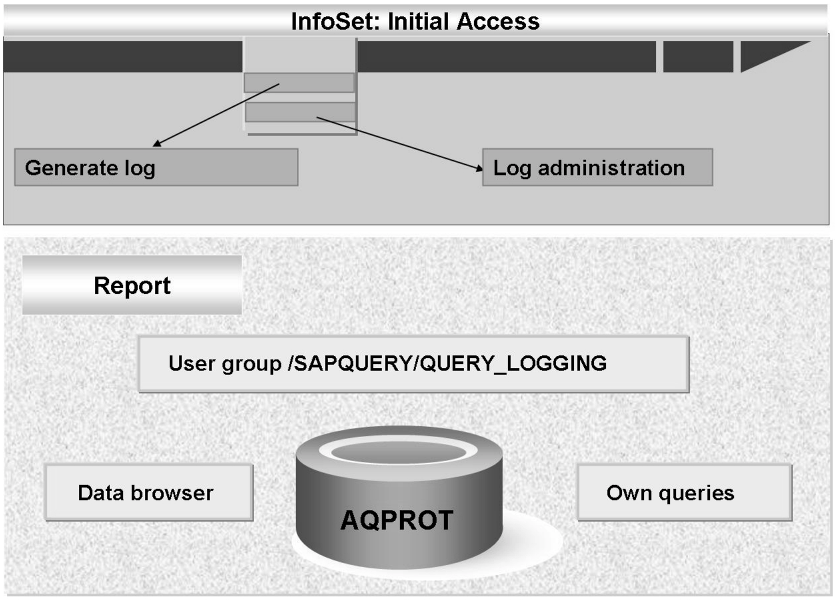
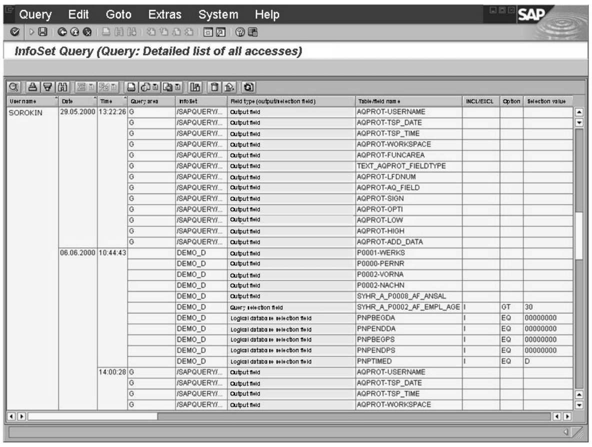


Figure 609: Logging I

Through the Ad Hoc Query, you can receive logs on the execution of queries. To do so, you must link an InfoSet to logging. You can do this in the maintenance transaction SQ02 in the *Extras* menu.

Now, if you create and execute a query using this InfoSet (the query does not have to be saved), the system saves information such as user, entries on the selection screen, and so on (AQPROT table). You can report on this information using the data browser, existing queries from user group /SAPQUERY/QUERY_LOGGING (in the user group SAPQuery/SQ in the global work area), or with you own queries.

You can delete the logs in maintenance transaction SQ02, by choosing *Manage logs* under *Extras*. You access a selection screen on which you can restrict which logs are deleted. For example, you can delete all the logs for a user.



- Logs are optional
- Prerequisite:
  the query is started from Ad Hoc Query/InfoSet Query
- The following are logged:
  - Query area
  - InfoSet
  - User
  - Date and time
  - Selection fields, selection values, and selection options
  - Output fields
- Logs can be analyzed with InfoSet Query or Data Browser

Figure 610: Logging II

You can log queries that are executed using Ad Hoc Query/InfoSet Query. You can switch the log function on and off as required.

You can delete logs if they are no longer required.

The AQ_QUERY_PROT Business Add-In enables you to create your own logs. For more information, see the SAP Implementation Guide (IMG) under *SAP Query → Logging → BAdI: Define Own Logging*.

1045 Exercise 44: Creating and Changing InfoSets

Exercise Duration: 30 Minutes

Exercise Objectives

After completing this exercise, you will be able to:

- Create user groups
- Generate InfoSets for HR components
- Assign InfoSets to user groups
- Enhance InfoSets and change the names of field groups
- Transport Infosets

Business Example

You want to create your own queries. You therefore need to create InfoSets based on the right logical database.

Task 1:

Creating your own user group.

Hint: You work in the standard area that is defaulted. The trainer may have already set up the user group.

1. Create a user group **HR580##** (## = group number).

   Assign yourself to this user group.

2. Assign InfoSets **HR580PNPMINI** and **HR580PNPPCH** to your user group.
3. In your user group, maintain parameter AQB (Setting Up User Group) with parameter value HR580##.

Task 2:

Defining and generating Infosets.

1. Define and generate an InfoSet for **Personnel Administration** using the logical database PNPCE. The InfoSet should contain infotypes **0000-0004** and **0006-0008 PA_##**).

   Assign the InfoSet to your user group.

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2. Define and generate an InfoSet for **Training and Event Management** using the logical database PCH **(PE_##)**.

   To do so, use the **object type *course type (D)*** *(or business event type)* and **infotypes 1000 to 1002.**

   Assign the InfoSet to your user group.

3. Define an InfoSet using the logical database PNPCE that enables you to report on **Personnel Administration** data (infotypes 0-2) and output the **qualifications** held by a person (name: **PAQ_##**).

   Assign the InfoSet to your user group.

Task 3: Optional

Copying and editing Infosets.

1. Make a copy of InfoSet **PA_##**, rename the copy **PA2_##** and add infotypes 9-12 to it.

   Assign the InfoSet to your user group.

2. Change the names of some of the field groups by including the infotype numbers in the name of the field group.

Task 4: Optional

Transporting an InfoSet from the global work area to the standard work area.

1. Switch to the global work area and select any standard InfoSet. Use the *Transport InfoSets* option, and the **MERGE** import option. Perform an initial test transport, and determine whether the required InfoSet is transported.

2. Switch back to the standard query area, and rename the InfoSet **Standard_##**.

3. Assign the InfoSet to your user group.

Solution 44: Creating and Changing InfoSets

Task 1:

Creating your own user group.

Hint: You work in the standard area that is defaulted. The trainer may have already set up the user group.

1. Create a user group **HR580##** (## = group number).

   Assign yourself to this user group.

   a) In the SAP Easy Access menu, choose

      Tools → ABAP Workbench ⇒ Utilities ⇒ SAP Query ⇒ User Groups.

   b) You check the standard work area in the maintenance transaction by choosing *Environment ⇒ Query areas*.)

   c) Enter the name of the new user group, **HR580##** (## = group number).

      Choose *Create.*

   d) This takes you to the *User Group: Create or Change* screen.

      Enter a long text for the user group, and then choose Save.

      This takes you back to the initial screen.

   e) Choose *Assign users and InfoSets*. Enter your user name, and save.

2. Assign InfoSets **HR580PNPMINI** and **HR580PNPPCH** to your user group.

   a) Choose *Assign InfoSets*. Select the InfoSets **HR580PNPMINI** and **HR580PNPPCH.**

      Save your entries.

   b) You can now use Ad Hoc Query to access these InfoSets. (They are required for exercises that you will do later.)

3. In your user group, maintain parameter AQB (Setting Up User Group) with parameter value HR580##.

   a) To do so, choose *System ⇒ User Profile ⇒ Own Data* and choose the *Parameters* tab page.

   b) Enter **`AQB`** as the *Parameter ID* and enter **`HR580##`** as the *Parameter value*.

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Task 2:

Defining and generating Infosets.

1. Define and generate an InfoSet for **Personnel Administration** using the logical database PNPCE. The InfoSet should contain infotypes **0000-0004** and **0006-0008 PA_##**).

   Assign the InfoSet to your user group.

   a) In the SAP Easy Access menu, choose

      Tools → ABAP Workbench ⇒ Utilities ⇒ SAP Query ⇒ InfoSets

      or

      Human Resources ⇒ Information System ⇒ Settings ⇒ Current Settings ⇒ SAP Query: Maintain InfoSets

   b) Enter the name of the new InfoSet **PA_##**.

      Choose *Create.*

   c) The template *InfoSet: Title and Database* is displayed.

      Enter a name for the InfoSet, and the name of the logical database **(PNPCE)**; (also select the appropriate option).

      Press *Enter*.

   d) The *Infotype Selection* screen is displayed.

      From the infotype folder, choose the infotypes for the InfoSet. If necessary, use the search icon to find the infotypes concerned.

   e) Choose *Execute*.

      The InfoSet is created and displayed in a selection tree.

      Choose *Generate.*

   f) Return to the initial screen.

      Choose *Role/User Group Assignment.*

      Select your user group **HR580##.**

      Save your entries.

2. Define and generate an InfoSet for **Training and Event Management** using the logical database PCH **(PE_##)**.

   To do so, use the **object type *course type (D)*** *(or business event type)* and **infotypes 1000 to 1002.**

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Assign the InfoSet to your user group.

a) In the SAP Easy Access menu, choose

   Tools → ABAP Workbench ⇒ Utilities ⇒ SAP Query ⇒ InfoSets

   or

   Human Resources ⇒ Information System ⇒ Settings ⇒ Current Settings ⇒ SAP Query: Maintain InfoSets

b) Enter the name of the new InfoSet **PE_##**.

   Choose *Create*.

c) In the following template, enter a name for the InfoSet and the name of the logical database **(PCH)**.

   Save your entries.

d) In the following template, choose *Determine Object Type* to select the object type **course type (D)** and the necessary infotypes **1000** to **1002**.

   Choose *Continue*.

e) The InfoSet is created and displayed in a selection tree.

   Choose *Generate.*

   Return to the initial screen.

f) Choose *User Group Assignment.*

   Select your user group **HR580##.**

   Save your entries.

3. Define an InfoSet using the logical database PNPCE that enables you to report on **Personnel Administration** data (infotypes 0-2) and output the **qualifications** held by a person (name: **PAQ_##**).

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Assign the InfoSet to your user group.

a) In the SAP Easy Access menu, choose

Tools → ABAP Workbench ⇒ Utilities ⇒ SAP Query ⇒ InfoSets

or

Human Resources ⇒ Information System ⇒ Settings ⇒ Current Settings ⇒ SAP Query: Maintain InfoSets.

b) Enter the name of the InfoSet **PAQ_##** (##=group number).

Choose *Create.*

c) In the following template, enter a name for the InfoSet and the name of the logical database used **(PNPCE)**.

Choose *Continue*.

d) In the following template, enter the necessary infotypes from Personnel Administration (**0000** to **0002**). You can access the infotypes from Personnel Planning using the node **Infotypes of Related Objects.** Select the object type *Qualification → Fulfills (A032) → Object (1000).*

Choose *Continue*.

e) The InfoSet is created and displayed in a selection tree.

Choose *Generate* .

Return to the initial screen.

f) Choose *Role/User group assignment.*

Select your user group HR580##.

Save your entries.

Task 3: Optional

Copying and editing Infosets.

1. Make a copy of InfoSet **PA_##**, rename the copy **PA2_##** and add infotypes 9-12 to it.

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Assign the InfoSet to your user group.

a) In the SAP Easy Access menu, choose

   Tools → ABAP Workbench ⇒ Utilities ⇒ SAP Query ⇒ InfoSets

   or

   Human Resources ⇒ Information System ⇒ Settings ⇒ Current Settings ⇒ SAP Query: Maintain InfoSets

b) Choose *Copy.*

   Use the dialog box that is now displayed to enter the name of the InfoSet you want to copy (**PA_##**), and the name of the new InfoSet (**PA2_##**).

   Choose *Continue*.

c) Select the copied InfoSet.

   Choose *Change*.

d) Choose *Edit → Change Infotype Selection.*

   On the following screen, choose the infotypes that you want to add (**0009** to **0012**).

   Choose *Continue*.

   The InfoSet is enhanced by the specified infotypes.

e) Choose *Generate.*

   Return to the initial screen.

f) Choose *User Group Assignment.*

   Select your user group **HR580##.**

   Save your entries.

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2. Change the names of some of the field groups by including the infotype numbers in the name of the field group.

   a) Return to the initial screen.

      Choose *Change*.

      Select one of the field groups that you want to change.

   b) Right-click the field group and choose *Change Field Group* to add the infotype number to the field group name. Do this for a number of field groups.

      Choose *Continue*.

      Save your entries.

   c) Choose *Generate*.

Task 4: Optional

Transporting an InfoSet from the global work area to the standard work area.

1. Switch to the global work area and select any standard InfoSet. Use the *Transport InfoSets* option, and the **MERGE** import option. Perform an initial test transport, and determine whether the required InfoSet is transported.

   a) In the SAP Easy Access menu, choose

      Tools → ABAP Workbench ⇒ Utilities ⇒ SAP Query ⇒ InfoSets

      or

      Human Resources ⇒ Information System ⇒ Settings ⇒ Current Settings ⇒ SAP Query: Maintain InfoSets.

   b) To switch to the global query area, choose *Environment ⇒ Query areas.* The system displays a dialog box that enables you to select a query area. Choose *Global area.* Select any InfoSet from the list.

      Choose *Transport.*

   c) Select *Copy Global Area ⇒ Standard Area* and *Transport InfoSets.*

      Enter the name of the InfoSet, and select the import option **MERGE**.

      Select *Test run.*

   d) To start the transport, choose *Execute.*

      Check the resulting log to determine whether the InfoSet can be transported. If the transport does not trigger any problems, deselect *Test run.* To start the transport, choose *Execute.*

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2. Switch back to the standard query area, and rename the InfoSet **Standard_##**.

   a) To switch to the standard query area, choose *Environment ⇒ Query areas*. The system displays a dialog box that enables you to select a query area.

   b) Select *Standard area.*

      Select the InfoSet you transported from the list.

      Choose *Rename.*

   c) In the dialog box that is displayed, enter the new name (**(Standard_##)**).

      Choose *Continue*.

3. Assign the InfoSet to your user group.

   a) Choose *Role/User group assignment.*

      Select your user group **HR580##.**

   b) Save your entries.

Lesson Summary

You should now be able to:

- Create infoSets and field groups

Unit Summary

You should now be able to:

- Explain the importance of logical databases, InfoSets and user groups
- List the functions of the logical databases PNP/PNPCE, PCH, and PAP
- Create infoSets and field groups

Unit 37

1057

Ad Hoc Query

For more information, see the Instructor Guide in SAPNet.

Unit Overview

After completing this unit, you will be able to:

- Describe the principle of Ad Hoc Query
- Select selection fields and a selection period
- Enter selection values
- Define and format output
- Output and export reports
- Save and reuse queries
- Perform set operations
- Explain how Ad Hoc Query is integrated in HR

Unit Objectives

After completing this unit, you will be able to:

- Describe the principle of Ad Hoc Query
- Choose selection fields
- Enter selection values
- Output and export reports
- Save and reuse queries
- Perform set operations
- Explain how Ad Hoc Query is integrated in HR

Unit Contents

Lesson: Defining First Queries with Ad Hoc Query

1058

Lesson Duration: 40 Minutes

Lesson Overview

In this lesson, you learn how to define simple queries using Ad Hoc Query.

Lesson Objectives

After completing this lesson, you will be able to:

- Describe the principle of Ad Hoc Query
- Choose selection fields
- Enter selection values

For more information, see the Instructor Guide in SAPNet.

Business Example

- You regularly require special reports for which the SAP system provides no standard report. You want to use Ad Hoc Query to define your own reports, and then make them available to other colleagues.
- You start by informing yourself about the options offered to you by Ad Hoc Query and you then use it to create the reports you require.
- An administrator provides you with the InfoSets you require to work with Ad Hoc Query.

Ad Hoc Query

- Is a tool used to report on data from Human Resources.
- Facilitates access to data from all areas of Human Resources.
- Is characterized by simple selection of selection and output fields.

Ad Hoc Query is a tool that enables you to report on the following **data**:

- *HR master data, data from Time Management*, and *payroll results* (logical database PNPCE)
- *Applicant master data* (logical database PAP)
- Data from *Personnel Planning* (logical database PCH)

You do not need programming skills to use Ad Hoc Query. Instead, you can select **selection and output fields** simply by clicking on them or by using Drag&Drop.

Ad Hoc Query selects the requested data directly from the database. As a result, its **performance** is better than that of standard reports because the latter use logical databases to retrieve data. The **standard authorization check** is performed when data is selected and output.

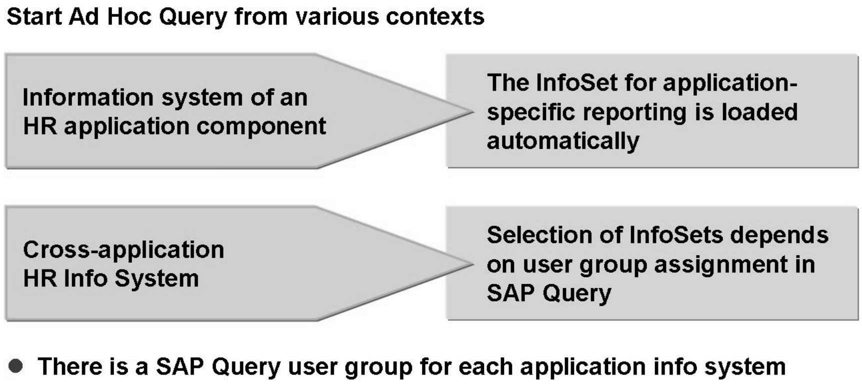


Figure 611: Structure of HR Info Systems

Before users can start the InfoSet query in the individual HR application component information systems automatically using the delivered InfoSets, they must be assigned to the relevant user group in the SAP Query. The following SAP Query user groups are used for the individual application components:

- /SAPQUERY/H0 for *Compensation Management*
- /SAPQUERY/H1 for *Benefits*
- /SAPQUERY/H2 for *Personnel Administration*
- /SAPQUERY/H4 for *Recruitment*
- /SAPQUERY/H4 for *Training and Event Management*

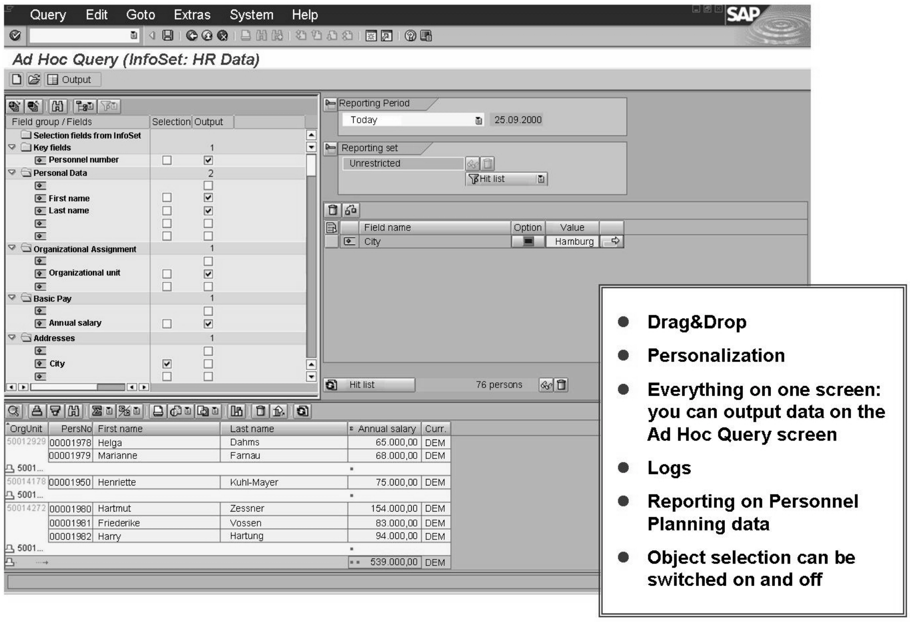


Figure 612: The Ad Hoc Query: Overview

You can select **selection and output fields** simply by using **Drag&Drop**. To do so, select one or more fields and then drag them to the required area (selection or output). If fields have **values** and **texts**, you can use the text, the value, or both (see “Processing Text Fields”).

The next time Ad Hoc Query is started, your **user settings** are reloaded (for example, the last queries that you accessed). This is the case when you exit Ad Hoc Query and when you log off the system.

The **output preview** enables you to output **real data** (see “Data Output on the Ad Hoc Query Screen”).

You can switch off **object selection** and work in **“Basic Mode”**, (choose *Extras → Switch Off Object Selection*). This gives you the advantage of being able to use all basis mode functions, such as selections using texts (see “Processing Text Fields”).

Hint: The disadvantage of switching object selection off is that you no longer benefit from improved performance (fast selection routine for persons and Personnel Planning objects). Furthermore, you cannot restrict the reporting set when object selection is switched off.

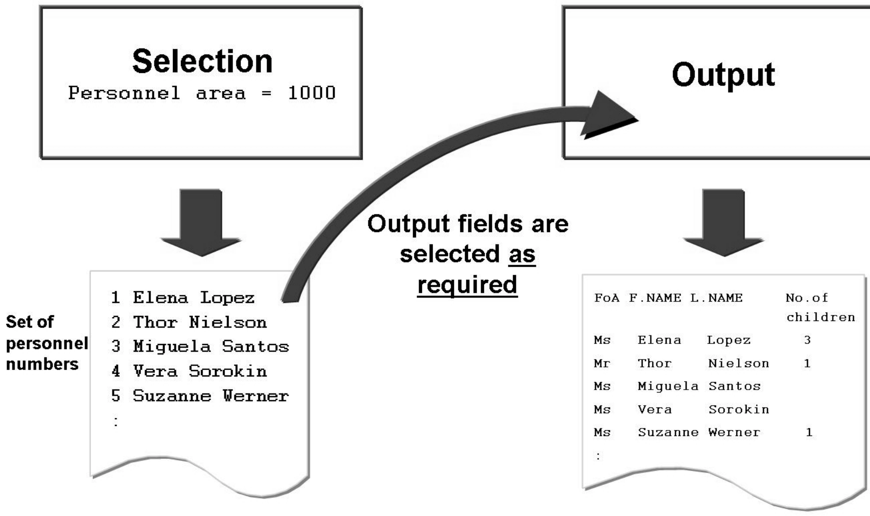


Figure 613: The Principle of Ad Hoc Query I

Ad Hoc Query's basic mode of operation consists of two steps:

- In the first step, you define one or more selection criteria and then start the selection. The result of this selection is a set of objects, such as persons, applicants, business events, or positions.
- In the second step, you output data as required for the selected objects.

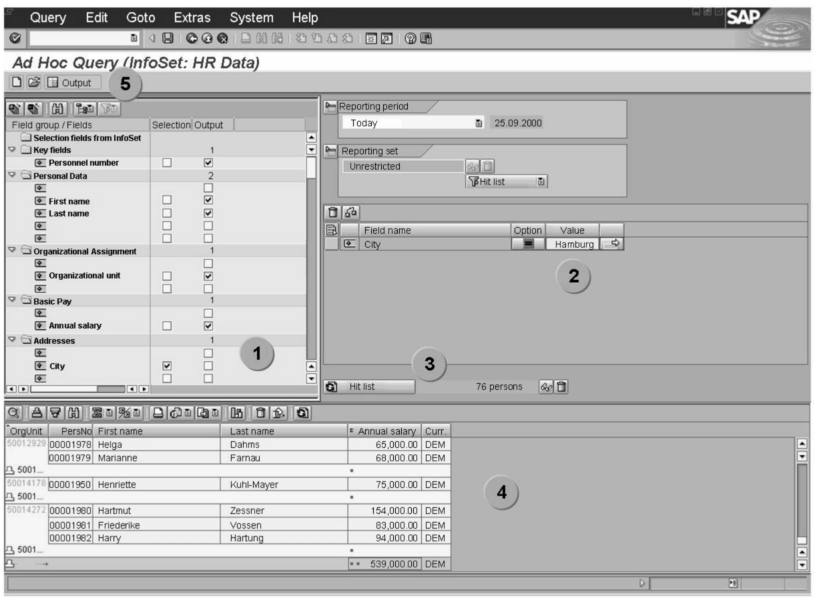


Figure 614: The Principle of Ad Hoc Query II

The Ad Hoc Query screen is divided into three **main areas**:

- The **field groups** and fields of the current **InfoSet** are displayed on the left of the screen. This part of the screen is used to select **selection and output fields**.
- The right side of the screen enables you to determine **selection values**, and execute your **selection**.
- The lower part of the screen contains a **preview of output**.

This slide explains the **main steps** you use when working with Ad Hoc Query.

1. Select selection and output fields in the overview tree.
2. Enter a value, and choose a selection option if necessary.
3. Execute the selection (the hit list is determined by selecting objects that match the selection criteria).
4. Format output in the output preview.
5. Access output.

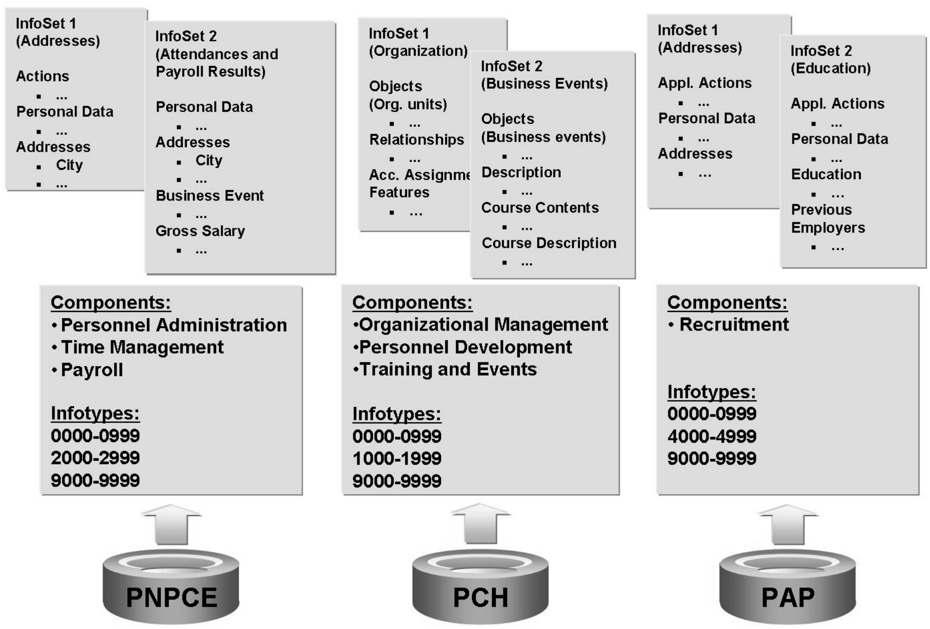


Figure 615: InfoSets for Ad Hoc Query

The InfoSets required for Ad Hoc Query are created and managed in SAP Query. When you create an InfoSet, you select the logical database on which it is based, and determine the infotypes which it includes. They are subsequently displayed in the InfoSet as field groups. Once you have selected your infotypes, you determine the fields of each infotype to be included in the field group.

The InfoSet determines the objects that you can select with Ad Hoc Query. The following scenarios are possible:

- The InfoSet is based on logical database PNP/PNPCE. These InfoSets enable you to use Ad Hoc Query to select **employees** and then output data on them. It is also possible to include Personnel Planning infotypes in these InfoSets. Therefore, you can use them to output person-related Personnel Planning data on the persons selected. Furthermore, you can use these InfoSets to report on payroll results.
- The InfoSet is based on logical database PAP. These InfoSets enable you to use Ad Hoc Query to select **applicants**.
- The InfoSet is based on logical database PCH. These InfoSets enable you to use Ad Hoc Query to select **objects of one object type**, such as business events, qualifications, or positions. When you create the InfoSet, you determine the object type that it enables you to select.

Figure 616: Choosing Selection and Output Fields

To access data in the system, Ad Hoc Query uses an InfoSet that provides you with a view of data in specific parts of HR. The view is structured by infotype. The InfoSet is displayed as an overview tree on the initial Ad Hoc Query screen.

You can select selection and output fields simply by using Drag&Drop. To do so, select one or more fields and then drag them to the required area (selection or output). If fields have values and texts, you can use the text, the value, or both (see “Processing Text Fields”).

If you can flag a field in the *Selection* (S) column, you can use it as a selection field.

Select the selection field in the overview tree (column: *Selection*). It is then copied to the list of selection criteria on the right of the screen. If you use more than one selection criterion, they are linked by AND logic; for example, all persons who live in London and are 25 years old.

You also select output fields in the overview tree. They are then copied to the preview of output as columns. You can select output fields at the same time as you select selection fields, or after you have made the selection. You can select output fields from field groups as required.

You can output field contents as values (value output), and sometimes as texts (text output). For example, form of address key: value: 01, text: Mr; value: 02, text: Ms. If in doubt, specify both. The text often conveys more meaning. If you are a power user, you may only require the values.

The number of selection criteria and output fields that you have chosen is specified in the overview tree for each field group.

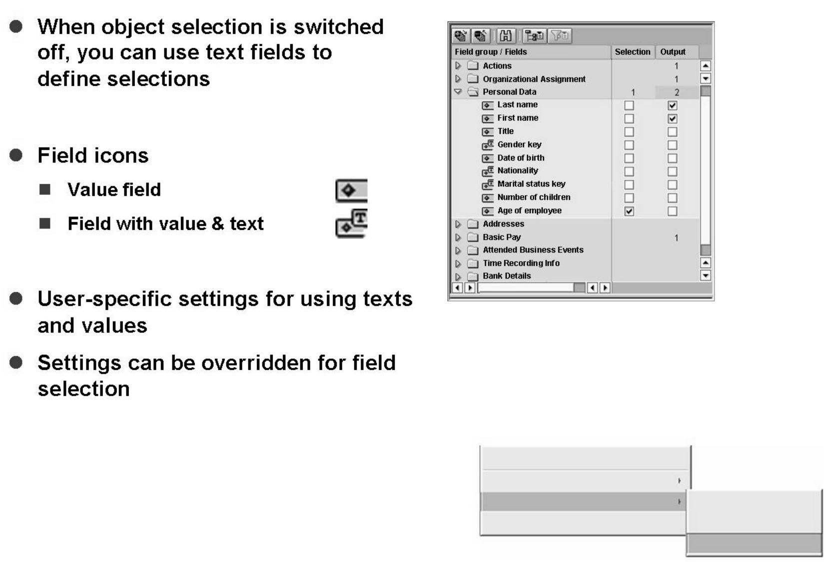


Figure 617: Treatment of Text Fields

If object selection has been switched off, and if values and texts exist for a field, you can select objects using values or texts. For example, you can select personnel area Frankfurt instead of personnel area 1000. The fact that object selection has been switched off is indicated by the absence of the *hit list* function and its output field.

For the output, you can always use the value and, when available, the text also.

When choosing a field for selection or output, the following applies:

- Select using Drag&Drop → User setting (see slide “Setting for Output/Export”).
- Select using checkboxes → User setting (see slide “Setting for Output/Export”).
- Select from context menu ⇒ You can choose between *Value*, *Text* or *Value and Text*.

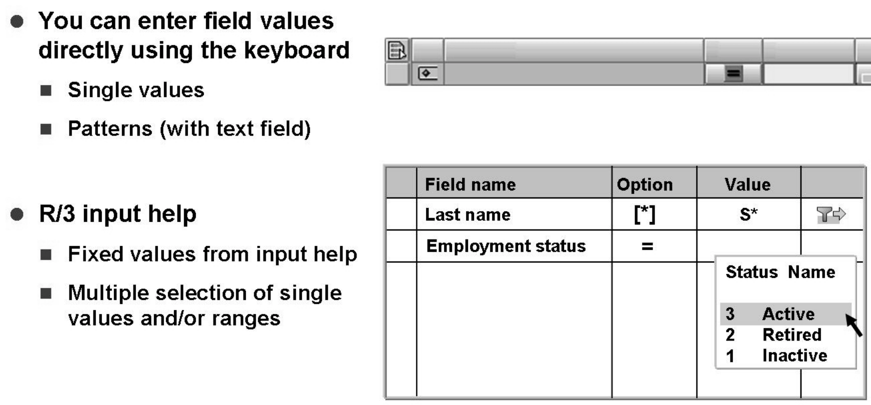


Figure 618: Entering Selection Options and Values

To restrict the selection, you enter values and, if necessary, selection options for the selection criteria.

You select the required selection option from input help.

You can enter values directly, or determine them using standard input help. Input help enables you to select an input value, and/or use multiple selection to enter any required number of single values or intervals.

The values you can enter depend on the type of selection field (for example, numeric, alphanumeric, date).

You can also use patterns as values. For example, if you want to find all of the employees whose names begin with S, enter S* as your value.

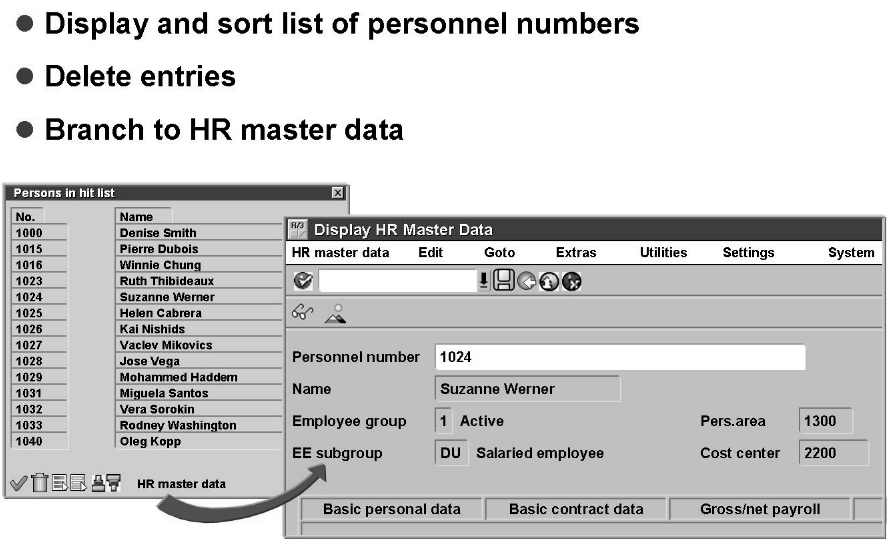


Figure 619: Editing the Selected Set of Objects

The result of each selection is a set of objects (such as persons or business events) for which you can output data. You can also use the following editing options for each object set:

- You can output the selected objects in a list.
- You can sort the list.
- If you do not want to output data for particular objects, you can remove them from the list.
- Pushbuttons enable you to
  - Branch directly to HR master data for a set of persons.
  - Branch directly to applicant master data for a set of applicants.
  - Branch directly to detail maintenance for other sets of objects.

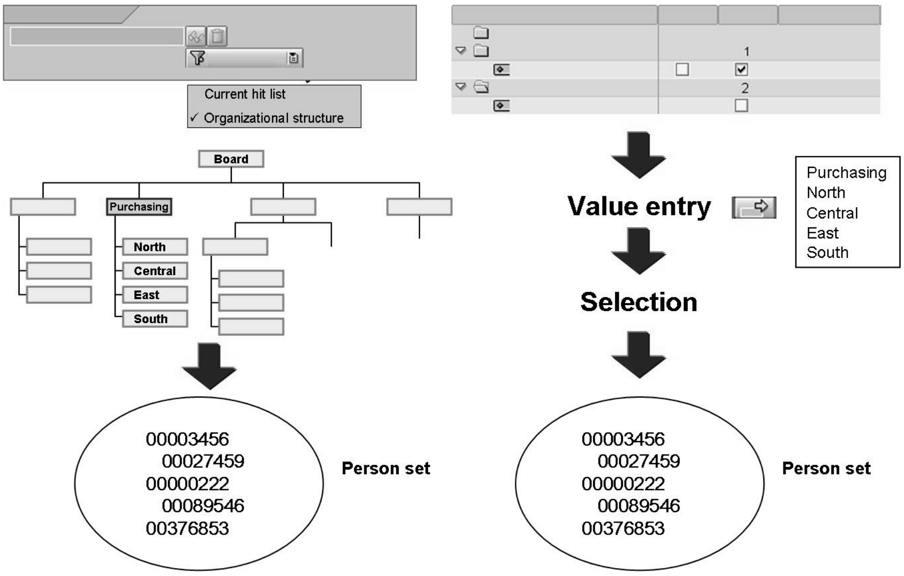


Figure 620: Selection Using Organizational Structure

Ad Hoc Queries are often required to report on employee data from one or more organizational units. Therefore, you can select persons using the organizational structure (if the InfoSets are based on logical database PNPCE).

To display the organizational structure, use the pushbutton. You can select the organizational unit(s) you require from the overview tree that appears:

When you confirm, the persons who belong to the organizational unit(s) are selected immediately. They are written to Ad Hoc Query as a reporting set.

If you make your selection using the organizational structure, the system takes the specified reporting period into account and uses the current plan version.

Hint: If you use the organizational structure to select a higher-level organizational unit, the selection includes all of the persons who belong to the selected organizational unit or one of the lower-level organizational units. To achieve the same result, you must use the *Organizational unit* selection field and explicitly specify all of the organizational units using multiple selection.

You can switch off object selection and work in "Basic Mode", (choose *Extras → Switch Off Object Selection*). This gives you the advantage of being able to use all basis mode functions, such as selections using texts (see "Processing Text Fields"). The fact that object selection has been switched off is indicated by the absence of the *hit list* function and its output field.

Hint: The disadvantage of switching object selection off is that you no longer benefit from improved performance (fast selection routine for persons and Personnel Planning objects). Furthermore, you cannot restrict the reporting set when object selection is switched off.

1069 Exercise 45: Defining First Queries

Exercise Duration: 50 Minutes

Exercise Objectives

After completing this exercise, you will be able to:

- Define selection criteria and output fields
- Edit the hit list
- Make your selection using the organizational structure

Business Example

You have special reporting requirements that are not satisfied by any standard report. You want to use Ad Hoc Query to define your own reports, and then make them available to other colleagues.

An administrator provides you with the InfoSets you require to work with Ad Hoc Query.

Hint: Work in the **Standard Area** in your user group **HR580##** for these exercises.

Hint: Use **Infoset HR580PNPMINI** (or the one you created in the previous unit: Infoset PA_##) unless instructed otherwise. Use TODAY as the reporting period unless instructed otherwise.

Hint: Your instructor will not be able to go through all of the exercises with you. The following exercises are flagged as OPTIONAL.

Task 1:

CREATING A SIMPLE QUERY

You require a query that allows you to report on all **employees according to the year in which they were born**. The query should display the following data for employees in the specified order:

• *Personnel numbers*

• *Last name*

• *First name*

• *Personnel area* (as value and text)

1. Report on how many employees were born in 1965 by selecting the relevant employees. How many employees does this include?

   ____

2. After selecting, display the list of employees. You should branch to HR master data for any two employees.
3. Delete these two employees from the list of selected employees. What effect does this have on the number of hits?

   ____

   ____

   ____

4. Start output.

Task 2:

MULTIPLE SELECTION

Enhance the query you created in exercise 1 so that it determines which employees were born between **1965 and 1967** and have **two or more** children. Display the exact number of children they have.

1. Report on how many employees fulfill these criteria by selecting the employees. How many employees does this include?

   ____

2. Start output. You can also save this query under the name GR##_AHQ_2.

Continued on next page

Task 3:

SELECTION USING ORGANIZATIONAL STRUCTURE

Define a NEW query that allows you to report on all employees who belong to the organizational unit *Human Resources (D)* (in *IDES AG* in the area *Exec. Director - Germany*). Use **Selection via Organizational Structure**. Display the following data for the selected persons:

- *Last name*
- *First name*
- *Organizational Unit*

1. Start output. You can also save this query under the name GR##_AHQ_3.

Solution 45: Defining First Queries

Task 1:

CREATING A SIMPLE QUERY

You require a query that allows you to report on all **employees according to the year in which they were born**. The query should display the following data for employees in the specified order:

• *Personnel numbers*

• *Last name*

• *First name*

• *Personnel area* (as value and text)

1. Report on how many employees were born in 1965 by selecting the relevant employees. How many employees does this include?

   ____

   a) In the SAP Easy Access menu, choose *Human Resources ⇒ Information System → Reporting Tools ⇒ Ad Hoc Query*. As work area, enter *Standard area* and as user group, enter *HR580##*. The Infoset for exercises 1 to 4 is **HR580PNPMINI**.

      Choose Continue (Enter).

      Select TODAY as the reporting period.

   b) In the field group *Actions* choose the output field *Personnel Number*. In the field group *Personal Data* choose the selection field *Year of Birth* and the output fields *Last Name* and *First Name*.

      In the field group *Organizational Assignment*, choose the output field *Personnel Area* (use the right mouse to choose the option *Output Value and Text*). If necessary, change the sequence of the columns in the output preview. To do this select one column at a time and use Drag&Drop to drag the column to the desired position.

   c) Enter the value for the year of birth as **1965**. Start selection by choosing *Hit List*. In the neighboring field, read the number of selected persons.

2. After selecting, display the list of employees. You should branch to HR master data for any two employees.

   a) Display the list of selected employees using the *Display Number of Hits* (pushbutton next to the hit list). To branch to HR master data, select the required person and choose *HR Master Data*.

Continued on next page

3. Delete these two employees from the list of selected employees. What effect does this have on the number of hits?

   ____

   ____

   ____

   a) To delete a person from the list, select the relevant person and choose *Delete Line(s)*. The number of hits is reduced by the number of persons you deleted from the list.

4. Start output.

   a) To start the output, choose *Output*.

Task 2:

MULTIPLE SELECTION

Enhance the query you created in exercise 1 so that it determines which employees were born between **1965 and 1967** and have **two or more** children. Display the exact number of children they have.

1. Report on how many employees fulfill these criteria by selecting the employees. How many employees does this include?

   ____

   a) Extend the query you created in exercise 1 as follows:

      In the field group *Personal Data*, choose *Number of Childres* as the selection field and the output field. Using multiple selection, enter the interval **1965 to 1967** in the selection field *Year of Birth*. In the selection field *Number of Children*, enter **2** and choose the selection option >=.

   b) Start selection by choosing *Hit List*. In the neighboring field, read the number of selected persons.

2. Start output. You can also save this query under the name GR##_AHQ_2.

   a) To start the output, choose *Output*. Optional: You can save this query under the name GR##_AHQ_2. To do this, choose *Save Query As* and enter the name.

Continued on next page

Task 3:

SELECTION USING ORGANIZATIONAL STRUCTURE

Define a NEW query that allows you to report on all employees who belong to the organizational unit *Human Resources (D)* (in *IDES AG* in the area *Exec. Director - Germany*). Use **Selection via Organizational Structure**. Display the following data for the selected persons:

- *Last name*
- *First name*
- *Organizational Unit*

1. Start output. You can also save this query under the name GR##_AHQ_3.
   a) Query with selection of organizational unit using organizational structure:
   b) To create a new query, choose *Query ⇒ New* (Infoset HR580##, user group and work area are entered by default) and press *Enter*.
   c) To make a selection using the organizational structure, select *Persons Using Organizational Structure* from the *restrict by: selection list* in the *Reporting set* group box.
   d) To display the organizational structure, click once on the *Organizational Structure* entry. Under *IDES AG*, in the area *Exec. Director - Germany*, select the organizational unit *Human Resources (D)*. All employees who belong to this organizational unit - including those assigned to the subordinate organizational units - are selected. They are available as a reporting set for additional reports or for display.
   e) In the *Personal data* field group, select the *Last name* and *First name* output fields. In the field group *Organizational Assignment*, choose the selection field *Organizational Unit*. Choose *Output*.
   f) Optional: You can save this query under the name GR##_AHQ_3. To do this, choose *Save Query As* and enter the name.

Lesson Summary

You should now be able to:

- Describe the principle of Ad Hoc Query
- Choose selection fields
- Enter selection values

Lesson: Defining Complex Queries with Ad Hoc Query

1075

Lesson Duration: 40 Minutes

Lesson Overview

In this lesson, you learn how to define more complex queries using Ad Hoc Query.

Lesson Objectives

After completing this lesson, you will be able to:

- Output and export reports
- Save and reuse queries
- Perform set operations
- Explain how Ad Hoc Query is integrated in HR

For more information, see the Instructor Guide in SAPNet.

Business Example

- You regularly require special reports for which the SAP system provides no standard report. You want to use Ad Hoc Query to define your own reports, and then make them available to other colleagues.
- You start by informing yourself about the options offered to you by Ad Hoc Query and you then use it to create the reports you require.
- An administrator provides you with the InfoSets you require to work with Ad Hoc Query.

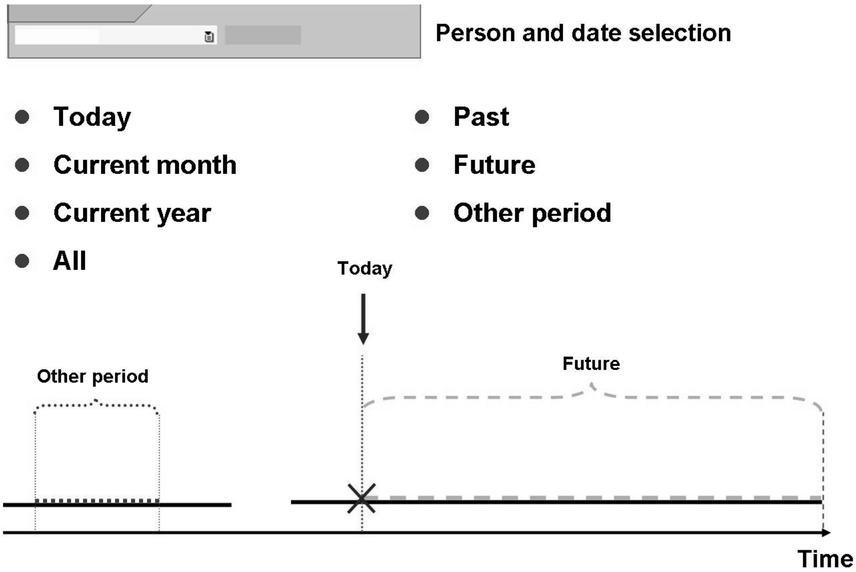


Figure 621: Determining the Reporting Period

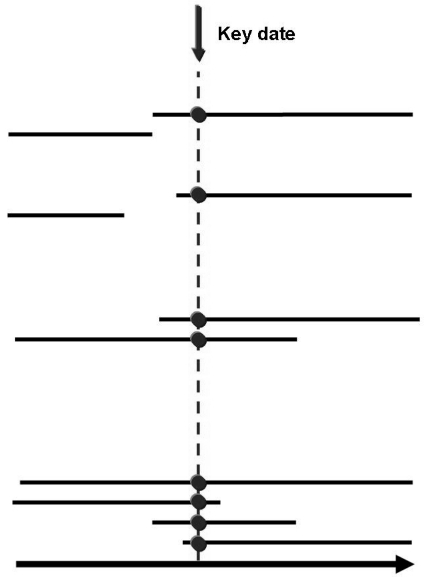
The reporting period enables you to determine the period from which objects are retrieved. The system searches for objects that have valid infotype records that meet the selection criterion in the period you specified.

Examples:

- If you want to determine which employees belong to personnel area 1000 today, use today as your *reporting period. Today* is the system date.
- If you want to determine which employees belonged to personnel area 1000 in 1995, use *other period* to enter January 1 1995 as the start date, and December 31 1995 as the end date.
- If you want to determine which employees belong to the personnel area in the current month, use the *current month*.

Hint: The system always selects all objects for which a valid record exists at ANY point within the reporting period. If you report on an entire year (for example), the system selects employees who belonged to organizational unit 1000 (for example) for just one day during that year as well as employees who belonged to organizational unit 1000 for the whole year.

Hint: The reporting period also affects data output (persons and data selection period). You can separate these time periods on the selection screen if required.



- Time constraint 1 (IT Personal Data)

Last name	First name	Name at birth
Smith	Denise	Haddem

- Time constraint 2 (IT Time Recording)

Last name	First name	Time ID card number
Kopp	Oleg	1234567

- Time constraint 3 (IT Previous Employers)

Last name	First name	Industry
Washington	Rodney	Publishing
Washington	Rodney	High tech

- Subtypes with different time constraints (subtypes IT Address)

Last name	First name	City	Address type
Cabrera	Helen	New York	Permanent address
Cabrera	Helen	London	Temporary address
Cabrera	Helen	Berlin	Temporary address
Cabrera	Helen	Walldorf	Temporary address

Figure 622: Time Constraints and Data Output

An infotype's time constraint affects the contents of the output list. When a selection is made, the system determines whether objects exist that meet the selection criterion during the reporting period (see the Reporting Period slide).

When output is executed, all of the valid records that exist for the selected objects are output. If you report on data for a **key date**, different numbers of records are output depending on the time constraint specified for the infotype and possibly its subtypes.

- **Time constraint 1:** one row is output per object because the system always contains just one valid infotype record (for example, infotype 0002 Personal Data).
- **Time constraint 2**: one row is output per object because the system can only ever contain one valid infotype record (for example, infotype 0050 Time Recording Info).
- **Time constraint 3**: the system can contain several valid infotype records at the same time. For this reason, the number of valid records determines the number of rows output per object (for example, infotype 0023 Other/Previous Employers).
- **Subtypes with different time constraints**: if an infotype has subtypes, the subtypes' time constraints can determine that different numbers of records exist for each subtype. For this reason, the number of records that exist determines the number of rows output per object. For example, you select all of the employees who live in New York. Your selection lists all of the persons who reside in New York. If you then output these persons' cities, a row is output for each valid city; for example, the permanent residence of New York (subtype with time constraint 1) and the temporary residences of London, Berlin, and Walldorf (subtype with time constraint 3).

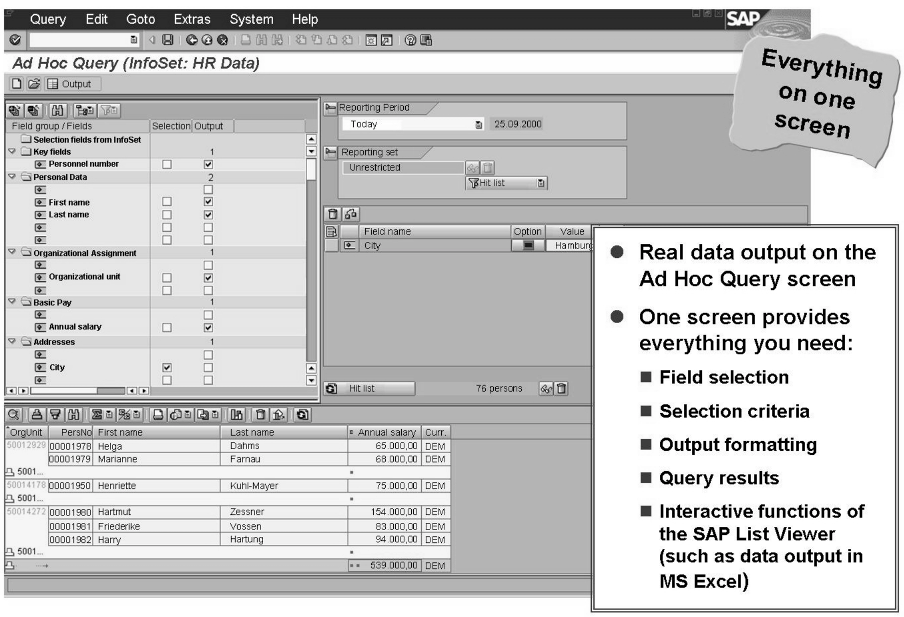


Figure 623: Data Output on the Ad Hoc Query Screen

The lower part of the Ad Hoc Query screen contains a preview of output in the SAP List Viewer. It enables you to use example data to acquire an impression of the output list's appearance.

The *Refresh* function enables you to replace the example data with real data. The data is output to the SAP List Viewer on the Ad Hoc Query screen. This means that the definition and result of a query are both included in a single screen.

Once you have output real data, you can use SAP List Viewer functions on the Ad Hoc Query screen. For example, you can:

- Search for entries
- Calculate totals and subtotals
- Display the output list in Excel and then use all Excel functions
- Use ALV's export and display options

For more information about the functions of the SAP List Viewer, see the SAP Library under *Getting Started ⇒ Working with Tools and Functions → Working with Lists → SAP List Viewer for SAP GUI.*

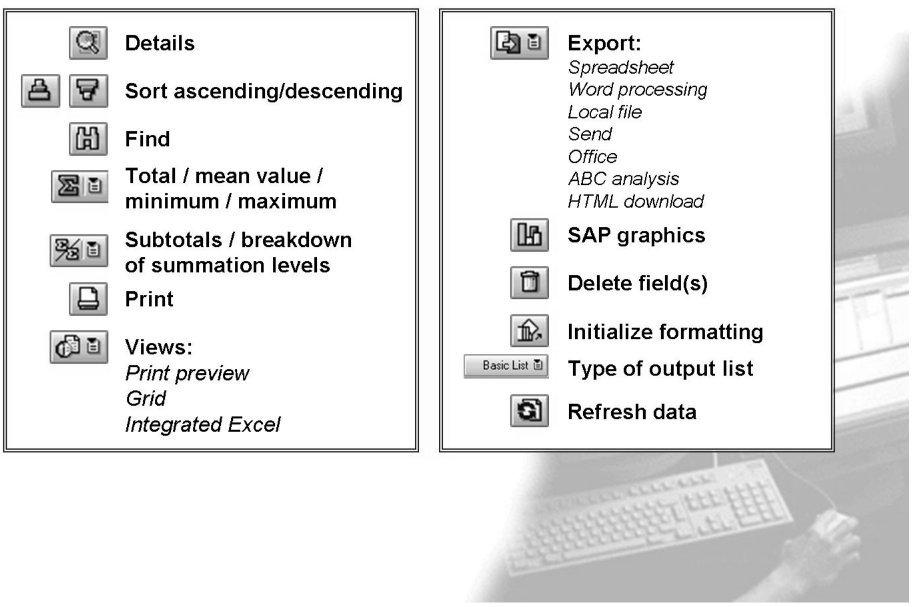


Figure 624: Defining and Formatting Output

The preview of output allows you to see the layout of the output list before data is finally output. It also enables you to format the output list.

You can:

- Sort the list by one or more columns.
- Calculate totals for numeric columns in basic lists and calculate subtotals using specific criteria (non-numeric columns).
- Delete all output fields at once.
- Initialize formatting.
- Determine the position of the currency column in basic lists, or hide it completely.

The context menu for ranked lists and statistics enables you to determine whether additional columns (mean value, share in %, and total number) are output.

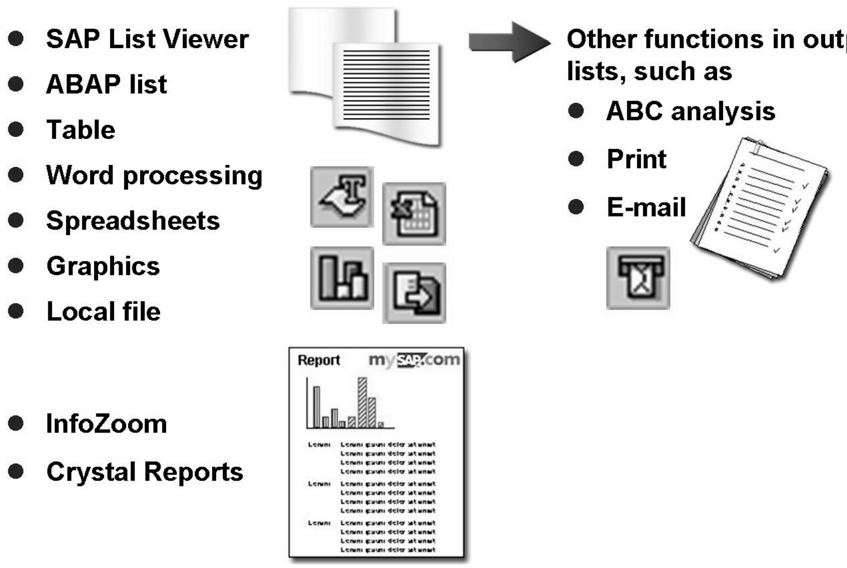
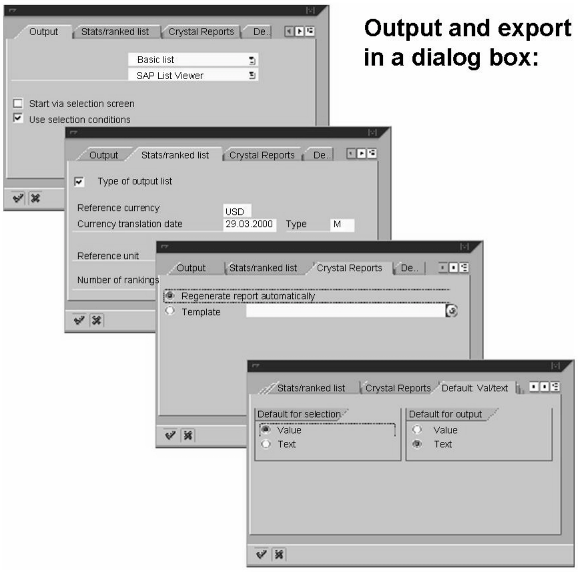


Figure 625: Types of Output

You can select the type of output. The type of output determines how data is displayed when output. You can choose from various types of list output and export functions. For example, you can output data for spreadsheets. In this instance, a list is not output to the screen. Instead, the report is copied to a file that you can then edit using a spreadsheet program.



Output and export settings are entered in a dialog box:

- Select type of output list: basic list/ranked list/statistics
- Start query via standard selection screen of logical database
- Use selection conditions for output
- Reference currency and counter
- Export to Seagate Crystal Reports
- Settings for field selection (value or text)

All settings are user-specific

Figure 626: Settings for Output/Export

Choose *Edit* ⇒ *Settings* to specify various **output** and **export** settings in a single dialog box.

- The ***Output*** tab page enables you to select the type of output list (basic list, statistics, ranked list) and the type of output (such as standard list, word processing, and spreadsheet). It also enables you to determine whether the query is started via a selection screen. Ad Hoc Query uses the SAP List Viewer as the standard type of output.
- The ***Stats/ranked list*** tab page enables you to determine the reference currency used to translate currency fields, and the reference unit used to translate units of measurement. It also enables you to specify the number of lines included in a ranked list.
- The ***Crystal reports*** tab page enables you to determine how data is exported to Crystal Reports if Crystal Reports is started directly from InfoSet Query. You can create a new Crystal Report each time data is exported, or you can export data to an existing Crystal Report on your local PC.
- The ***Default: Val/text*** tab page enables you to determine whether the value or the text is used when a field is selected by Drag&Drop or checkbox. You can override these defaults by using the context menu to select a field.

- **Basic list**
- **Statistics**
- **Ranked list**

Basic list: monthly salaries in organizational unit 00001000

Last name	First name	Monthly sal.	Curr.
Smith	Denise	6500.00	UNI
Vega	Jose	2575.00	UNI
Mikovics	Vaclev	4500.00	UNI
Washington	Rodney	9600.00	UNI
Werner	Suzanne	10200.00	UNI
Haddem	Mohammed	3280.00	UNI
Kopp	Oleg	5400.00	UNI
Cabrera	Helen	4800.00	UNI

Statistics: monthly salaries per org. unit

Org.unit	Monthly salary in UNI	No.
00001000	46,855.00	8
00502020	75,954.00	12
50067231	156,589.00	20
Total	279,398.00	40

Ranked list: investment types for savings plans

Rank	Investment type	No.
1.	Building/loan association	171
2.	Installment savings	56
3.	Capital savings	12
4.	Life insurance	5

Figure 627: Type of output list

Basic lists enable you to output detailed overviews. Statistics and ranked lists enable you to output aggregated data.

Example of a **basic list**: you want to output an overview of monthly salaries received by employees in an organizational unit. To do so, you use the required organizational unit as a selection criterion and output the name and monthly salary. You select basic list as your output type. When output is defined this way, the currency field is output automatically.

Example of **statistics**: instead of an overview of individual salaries, you want to output monthly salary totals per organizational unit. In this instance, you use the required organizational units as selection criteria, and *organizational unit* and *monthly salary* as output fields. You select statistics as your output type. The total of monthly salaries is output for each organizational unit. The number of values included in the total is only output if you have defined output accordingly. A totals row is also output for each statistic. In this example, it contains the total of monthly salaries and the total number of values included.

Example of **ranked list**: you want to determine the investment types that are most frequently selected as savings plans at your enterprise. To do so, select all of the employees at your enterprise. Select ranked list as your type of output list. Use the investment type as the only output field. The output list contains the investment types, which are sorted by the number of employees who selected them. The number of rows output in ranked lists is limited. The rank and number columns are output automatically.

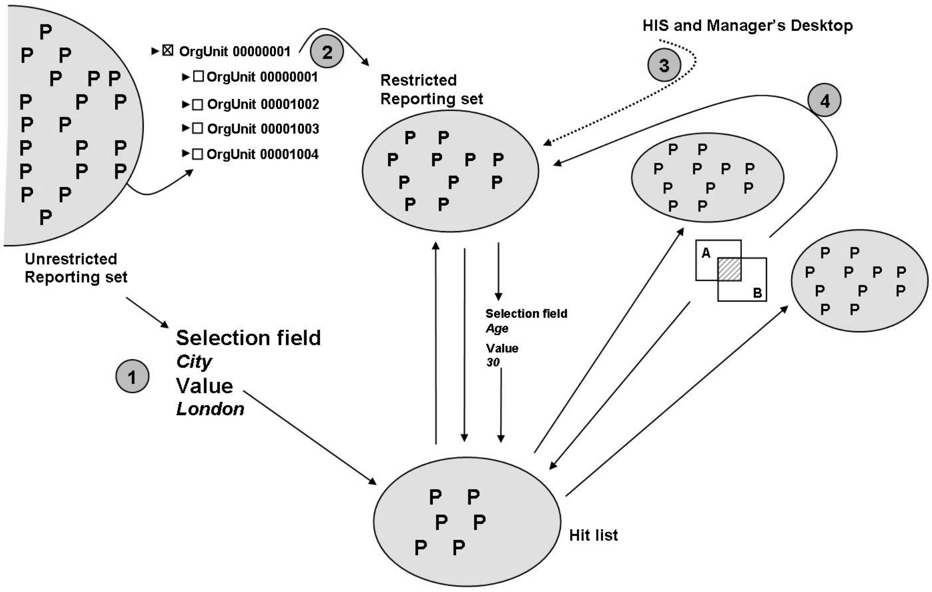


Figure 628: Restricting the Reporting Set

If you do not restrict the reporting set, selections are performed for all of the objects of an object type that are stored in the system. However, reports are often required for just one specific set of objects, such as the employees assigned to an organizational unit or a group of persons who meet certain conditions. You can satisfy this requirement by restricting the reporting set as appropriate.

You can use one of the following restrictions for sets of persons:

1. The current hit list, which you obtained by making a specific selection.
2. A set of persons that you selected by using the organizational structure.
3. A set of persons that you selected in HIS or Manager's Desktop.
4. A set of persons that you determined by using set operations.

You can define further restrictions of the reporting set (of persons). For more information, access the Implementation Guide (IMG) for the Human Resources Information System and read the section on *Selection IDs*.

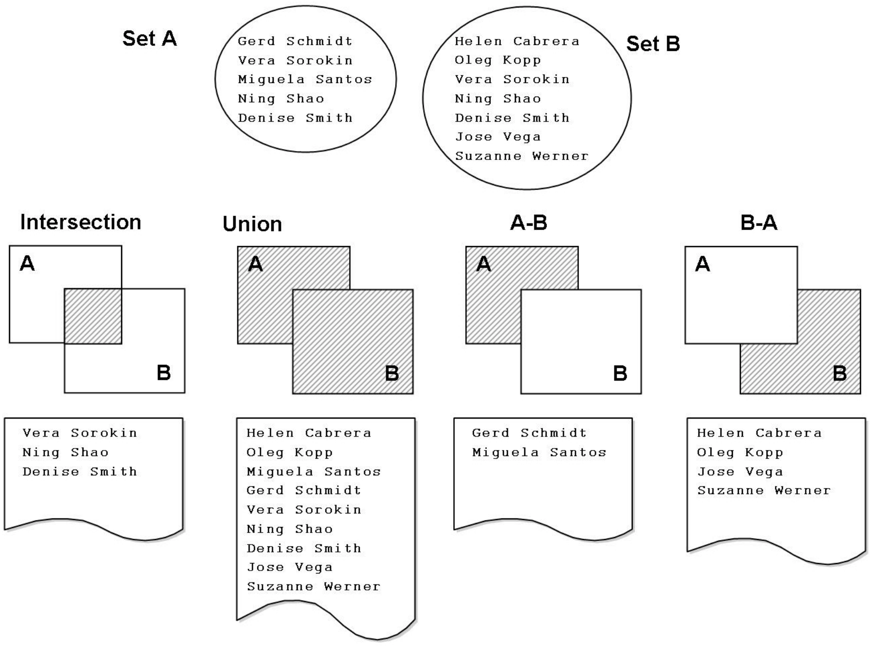


Figure 629: Set Operations

You can use hit lists from more than one selection to perform set operations. The additional “Set operations” tab page enables you to do so.

To perform a set operation, make a selection, copy the hit list to set A, make a second selection, and copy the second hit list to set B. You can then perform the following set operations:

- Create intersections
- Create unions
- Add sets
- Subtract sets

The resulting set can be used

- For further set operations
- As a precondition for further selections
- As a hit list, and therefore as the basis of data output

Set operations are suitable, for example, for

- “Negative selections”; that is, if you want to find employees for whom a specific infotype record does not exist (for example, if a temporary residence has not been recorded).
- Combinations of person sets that have been selected using different selection criteria, and for whom data must be output in a joint list.

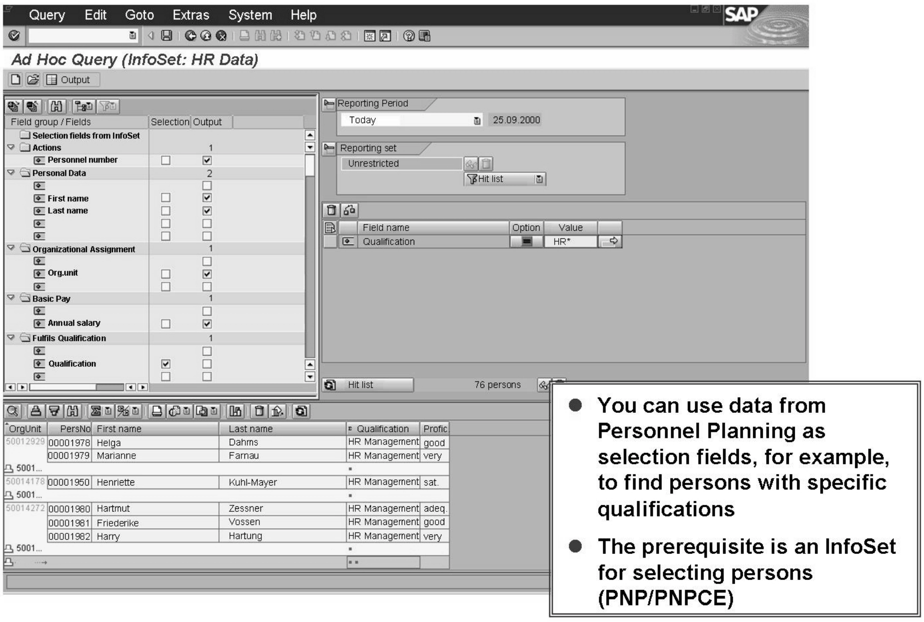


Figure 630: Reporting on Data from Personnel Planning

In earlier releases, Personnel Planning data could be output for selected sets of persons but could not be used to make selections. This restriction no longer applies as of release 4.6C. The infotypes of related objects can now be used as selection and output fields for persons and Personnel Planning objects.

The prerequisite is an InfoSet created on the basis of logical database PNP/PNPCE (HR master data).

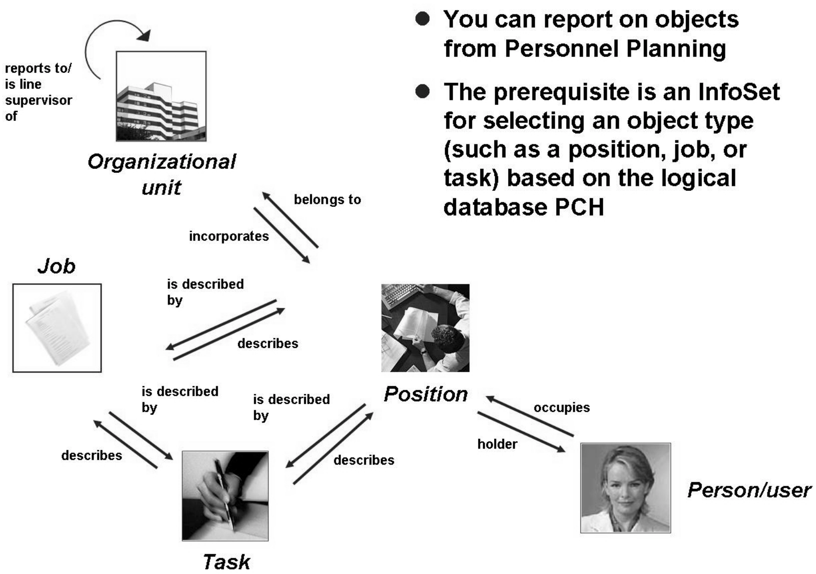


Figure 631: Reporting on Data from Personnel Planning

In earlier releases, you could only use Ad Hoc Query to select sets of persons. You could output any data from Personnel Administration for the selected persons, as well as data from infotypes of related Personnel Planning objects. You could not use Personnel Planning data to make selections.

You can also select Personnel Planning objects and report on related objects (business events and their related objects, for example).

The prerequisite is that you use an InfoSet specially created for selecting a specific object type, such as business events (based on PCH).

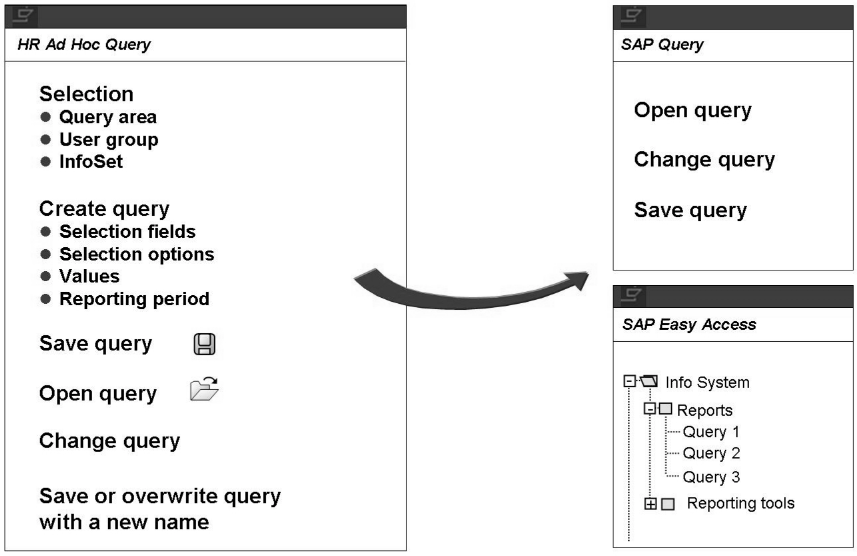


Figure 632: Reusing Queries

When you create queries, you can switch between query areas, user groups, and InfoSets. If you are assigned to a user group, you can save queries. The query is automatically available to all of the users who belong to the same user group.

If you often perform reporting using the same selection criteria but different values, you are advised to save queries without specifying values. Do not enter data in the value and option fields before saving.

If you often perform reporting using the same selection criteria and the same values, you are advised to save queries with values.

Saved queries can be accessed from Ad Hoc Query, SAP Query, and menus. If you access saved queries from Ad Hoc Query, you can then execute them, change them if necessary, save them in their changed form, or save them with a new name.

SAP Query enables you to continue editing saved queries. You are advised to continue editing in SAP Query if you want to use particular output functions in SAP Query, such as summation levels or colors in the output list.

Caution: The technical name of a query must not exceed 14 characters, and must not contain any special characters with the exception of underscores and hyphens. Queries that contain a period, for example, can be saved but cannot be reaccessed.

Integration of Ad Hoc Query

- Information Systems
- Access from HIS
- Start from Manager's Desktop
- Input help for object selection
- Processing of selected object set in general reporting

Ad Hoc Query can be accessed in HR as a stand-alone tool from the various info systems in the SAP Easy Access Menu. However, it is also integrated with other HR reporting tools.

- You can access Ad Hoc Query from **HIS**. The set of persons selected in HIS is available as a reporting set in Ad Hoc Query. You can make further selections from this set, or use it as a hit list and output data on the persons. You can even use saved queries for the selected set of persons.
- In the same way, you can use Ad Hoc Query to process sets of persons determined in **Manager's Desktop.** To do so, select a suitable object from the *Employee* theme category in Manager's Desktop, and access Ad Hoc Query.
- Ad Hoc Query is also available in many HR **input helps** for selecting objects in the system (for fast data entry in Personnel Administration, for example).

You can use standard reports to continue processing sets of objects selected by Ad Hoc Query.

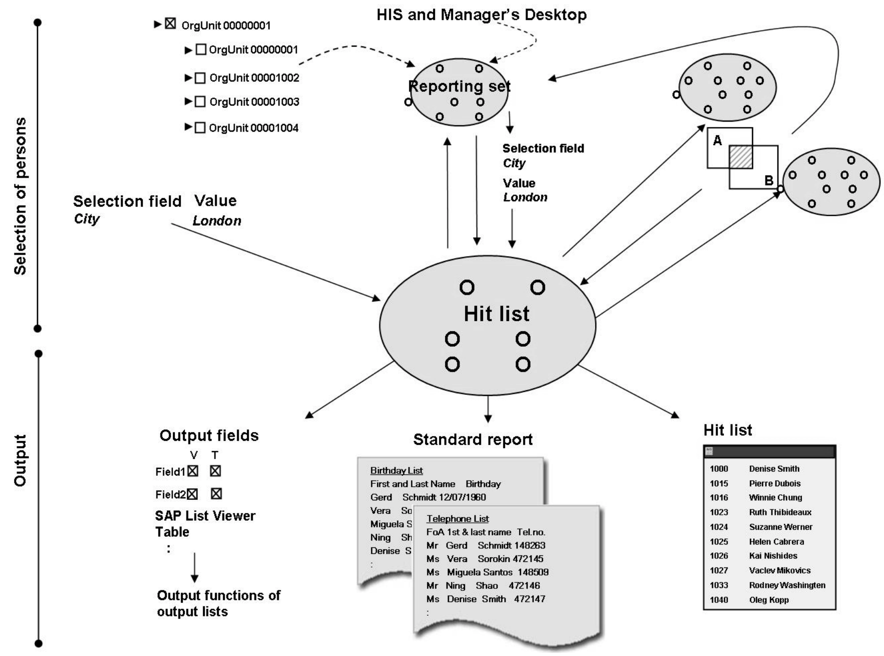


Figure 633: Conclusion

This slide summarizes the options available to you in Ad Hoc Query.

You can select a set of objects as follows:

- Selection using selection fields, selection options, and values
- Restriction of reporting set using any selections or set operations
- Set Operations
- Selection of set of persons in HIS or Manager's Desktop
- Selection of set of persons using organizational structure

You can continue to process data as follows:

- Output/export list with the required output fields
- Process selected set of objects in general reporting; data is output by the selected standard report
- Display hit list, delete unnecessary objects as required

1089 Exercise 46: Define Complex Queries

Exercise Duration: 90 Minutes

Exercise Objectives

After completing this exercise, you will be able to:

- Define statistics and ranked lists
- Create reports for Personnel Planning objects
- Specify a reporting period
- Save and reuse queries
- Perform set operations
- Branch to standard report processing

Business Example

You need special reports for HR master data because your requirements are not met by any of the standard reports.

You define these reports using Ad Hoc Query.

Task 1:

Hint: Work in the **Standard Area** in your user group **HR580##** for these exercises.

Hint: Use **Infoset HR580PNPMINI** (or the one you created in the previous unit: Infoset PA_##) unless instructed otherwise. Use TODAY as the reporting period unless instructed otherwise.

Hint: Your instructor will not be able to go through all of the exercises with you. The following exercises are flagged as OPTIONAL.

STATISTICS AND RANKED LISTS

Define a NEW query that allows you to report on all employees who belong to the personnel area 1300, Frankfurt. Use the personnel area to select objects in this exercise, do **not** select objects via the organizational structure.

1. Display **statistics** that show how many employees belong to a specific personnel subarea (= number of employees per personnel subarea). How many employees belong to the individual personnel subareas?

Continued on next page

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2. Display a **ranked list** that specifies the five most common places of residence for employees who belong to personnel area 1300. Display option *Ranked List* Which is the most popular location and which is the second most popular location in the ranked list?

   ____

   ____

   You can also save this query under the name GR##_AHQ_4.

Task 2: Optional

COPYING THE REPORTING SET HIT LIST

Change the query you created in exercise 2, task 6 so that you can report only on employees in the personnel area 1000 Hamburg. The query should display the following data in the specified order:

- *Personnel numbers*
- *Last name*
- *First name*
- *Nationality*
- *Age*

1. Select all employees from personnel area 1000. How many employees does this include?

   ____

2. For performance reasons, use this set of persons as the reporting set. From this group of persons, select all employees whose nationality is French (FR) or Swiss (CH). How many employees does this include?

   ____

3. Start output. Sort the output list according to nationality.
4. Return to the initial screen of the Ad Hoc Query. Change the sequence of columns in the output preview as follows:
   - *Age*
   - *Nationality*
   - *Last name*

Continued on next page

- *First name*
- *Personnel numbers*

5. Use the output preview to sort the list according to *Nationality* (first sorting criterion) and *Age* (second sorting criterion).

   Choose *Spreadsheet* (MS Excel) as the output form and then *Standard List*. Start the output and note the differences.

6. You can also save this query under the name GR##_AHQ_5.

Task 3:

SET OPERATIONS

1. Use *set operations* to output all of the employees in the *CABB* personnel area who do not have a temporary residence.

   Choose *Edit⇒ Settings* and on the Output tab, check that the Selection Conditions indicator is not set.

   You can store this query as GR##_AHQ_6.

Task 4: Optional

QUERY WITH INFOSET OF LOGICAL DATABASES PNPCE AND PCH

1. Change to InfoSet **HR580PNPPCH** for this exercise. Output a list of employees who belong to personnel area 1000, Hamburg. The list should contain the following information: *personnel number, last name, first name, qualification (name).*

   Sort the list according to *last name* or *qualification*.

   You can also save this query under the name GR##_AHQ_7.

Task 5: Optional

SPECIFYING THE REPORTING PERIOD

1. Define a new query that enables you to determine which employees in personnel area CABB were hired to work on special projects in 1999 (action type 01, reason for action 05). The list must include the following information: *personnel number, first name, last name, and entry date.*

   Use Other period as the reporting period (January 01 1999 - December 31 1999).

   When were the employees hired?

   ____

Continued on next page

Task 6: Optional

STARTING STANDARD REPORTS

1. Use Ad Hoc Query to start the *Employee List* standard report (RPLMIT00) for all of the employees in either the CABB or 1000 Hamburg personnel area.

Solution 46: Define Complex Queries

Task 1:

Hint: Work in the **Standard Area** in your user group **HR580##** for these exercises.

Hint: Use **Infoset HR580PNPMINI** (or the one you created in the previous unit: Infoset PA_##) unless instructed otherwise. Use TODAY as the reporting period unless instructed otherwise.

Hint: Your instructor will not be able to go through all of the exercises with you. The following exercises are flagged as OPTIONAL.

STATISTICS AND RANKED LISTS

Define a NEW query that allows you to report on all employees who belong to the personnel area 1300, Frankfurt. Use the personnel area to select objects in this exercise, do **not** select objects via the organizational structure.

1. Display **statistics** that show how many employees belong to a specific personnel subarea (= number of employees per personnel subarea). How many employees belong to the individual personnel subareas?

   ____

   ____

   ____

   a) To create a new query, choose *Query ⇒ New* (Infoset HR580##, user group and work area are entered by default) and press *Enter*.

      In the field group *Organizational Assignment*, choose the selection field *Personnel Area* and enter the value **1300**. Start selection by choosing *Hit List*.

   b) In the field group *Organizational Assignment*, choose the selection field *Personnel Area*.

      Choose *Edit → Settings*. On the **Output** tab page, choose **Statistics** as the *Type of Output List*. Choose *Continue*. Choose *Output*.

2. Display a **ranked list** that specifies the five most common places of residence for employees who belong to personnel area 1300. Display option *Ranked List* Which is the most popular location and which is the second most popular location in the ranked list?

Continued on next page

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You can also save this query under the name GR##_AHQ_4.

a) Return to the initial screen of the Ad Hoc Query. Delete the output field *Personnel Subarea*. In the *Addresses* field group, select the *Location* output field.

b) Choose *Edit* → *Settings*. On the **Output** tab page, choose **Ranked List** as the *Type of Output List.* On the tab page **Statistics/Ranked List** enter the specify the number of rankings as 5.

   Choose *Continue.*

c) Choose *Output*.

d) Optional: You can save this query under the name GR##_AHQ_1. To do this, choose *Save Query As* and enter the name.

Task 2: Optional

COPYING THE REPORTING SET HIT LIST

Change the query you created in exercise 2, task 6 so that you can report only on employees in the personnel area 1000 Hamburg. The query should display the following data in the specified order:

• *Personnel numbers*

• *Last name*

• *First name*

• *Nationality*

• *Age*

1. Select all employees from personnel area 1000. How many employees does this include?

Continued on next page

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a) Extend the query you created in exercise 2 as follows:

Delete the selection fields *Year of Birth* and *Number of Children*. Delete the output fields *Personnel Area* and *Number of Children*. In the *Personal data* field group, select the employee's *Nationality* and *Age* output fields. In the field group *Organizational Assignment*, choose the selection field *Personnel Area*.

b) In the selection field *Personnel Area*, enter the value **1000**. Start selection by choosing *Hit List*. In the neighboring field, read the number of selected persons.

2. For performance reasons, use this set of persons as the reporting set. From this group of persons, select all employees whose nationality is French (FR) or Swiss (CH). How many employees does this include?

____

a) To use the selected number of persons as the reporting set, in the *Reporting Set* area, choose *No.of Hits*.

In the field group *Personal Data*, choose the selection field *Nationality*. Access multiple selection for the *Nationality* selection field, and enter the following values: **FR** and **US**.

Start selection by choosing *Hit List*. In the neighboring field, read the number of selected persons.

3. Start output. Sort the output list according to nationality.

a) Choose *Output*.

b) In the output list, select the *Nationality* column. Choose *Sort in Ascending Order* or *Sort in Descending Order* (pushbutton).

4. Return to the initial screen of the Ad Hoc Query. Change the sequence of columns in the output preview as follows:

- *Age*
- *Nationality*
- *Last name*
- *First name*
- *Personnel numbers*

a) Choose *Back* to return to the initial screen.

b) Change the sequence of columns in the output preview by choosing one column at at a time and using Drag&Drop to drag the column to the desired position.

Continued on next page

5. Use the output preview to sort the list according to *Nationality* (first sorting criterion) and *Age* (second sorting criterion).

   Choose *Spreadsheet* (MS Excel) as the output form and then *Standard List*. Start the output and note the differences.

   a) To select a line, click in any field in the output preview. Now choose *Sort in Descending Order* or *Sort in Ascending Order*.

   b) A dialog box is displayed in which you can choose all fields from the *Field Selection* (=all selected output fields) that you want to use to sort the output list. Select the sorting fields you want and choose *Show Selected Fields* (left arrow). Select the relevant field option to determine whether each field is to be sorted in ascending or descending order. Choose *Transfer*.

   c) Choose *Edit → Settings* to access the *Output* tab page. Then select *Spreadsheet* as the type of output and press *Enter*. To start the output, choose *Output*. In answer to the next two queries, enter *Table* and then *MS Excel*.

   d) Repeat this procedure for the output form *Standard List*.

6. You can also save this query under the name GR##_AHQ_5.

   a) Optional: You can save this query under the name GR##_AHQ_5. To do this, choose *Save Query As* and enter the name.

Task 3:

SET OPERATIONS

1. Use *set operations* to output all of the employees in the *CABB* personnel area who do not have a temporary residence.

   Choose *Edit⇒ Settings* and on the Output tab, check that the Selection Conditions indicator is not set.

Continued on next page

You can store this query as GR##_AHQ_6.

a) Select any output field you want (e.g. last name, city, address type). To show the *Set operations* tab page, choose *Extras → Show set operations*. Ensure that the indicator "**Use Selection Conditions**" is NOT set. To do so, choose *Edit → Settings* and the tab page Output.

b) First select all employees in the personnel area cabb:

   Choose the *Personnel area* selection field, and then make your selection with the word **`cabb`**; (choose *Refresh hit list.*) Copy the selected employees to set A (choose *Copy hits to set A*).

c) In the *Addresses* InfoSet, select the *Address record type* selection field. Enter **2** (temporary residence).

d) Make your selection by choosing *Refresh hit list.* Copy the selected employees to set B (choose *Copy hits to set B*). By doing so, you have copied all of the employees in personnel area CABB who have a temporary residence to set B.

e) Select the *Set operations* tab page. Sets A and B are both displayed.

f) To subtract set B from set A, select *Set A minus set B* and choose *Perform operation*. The system displays all of the persons who belong to the CABB personnel area and do not have a temporary residence. The set of persons is displayed in the *Resulting set* field. You may have to **scroll down.**

g) To output the list of persons, you must copy it to the hit list. To do so, select to hit list and choose *Copy resulting set*.

h) Switch to the *Selection* tab page. The hit list now only lists persons that do NOT have a temporary residence. Choose Output.

i) Optional: You can save this query under the name GR##_AHQ_6. To do this, choose *Save Query As* and enter the name.

Task 4: Optional

QUERY WITH INFOSET OF LOGICAL DATABASES PNPCE AND PCH

1. Change to InfoSet **HR580PNPPCH** for this exercise. Output a list of employees who belong to personnel area 1000, Hamburg. The list should contain the following information: *personnel number, last name, first name, qualification (name).*

   Sort the list according to *last name* or *qualification*.

Continued on next page

You can also save this query under the name GR##_AHQ_7.

a) To switch InfoSets, choose *Query → New*. The *Create New Query – InfoSet Selection* dialog box appears. Select the InfoSet **HR580PNPPCH**. Choose *Continue.* The selected InfoSet is displayed in the selection tree and you can use it to define queries.

b) In the field group *Organizational Assignment*, choose the selection criterion *Personnel Area*. In the selection field, Personnel Area, enter the value **1000**.

c) In the field group *Personal Data*, choose the output fields *Last Name* and *First Name*. In the field group *Qualification*, choose the output field *Qualification (Name).* Check the sequence of output fields in the output preview.

d) Choose *Output*. You can also save this query as GR##_AHQ_7 by choosing *Query⇒ Save as* and entering a name.

Task 5: Optional

SPECIFYING THE REPORTING PERIOD

1. Define a new query that enables you to determine which employees in personnel area CABB were hired to work on special projects in 1999 (action type 01, reason for action 05). The list must include the following information: *personnel number, first name, last name, and entry date.*

   Use Other period as the reporting period (January 01 1999 - December 31 1999).

   When were the employees hired?

   ____

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a) In the SAP Easy Access menu, choose *Human Resources ⇒ Information System → Reporting Tools ⇒ Ad Hoc Query.* If you are already in an InfoSet, choose *Query⇒ New*. As work area, enter *Standard area* and as user group, enter *HR580##.* The Infoset is **HR580PNPMINI.** Choose *Continue.*

   Select TODAY as the reporting period unless otherwise instructed.

b) In the *Personal data* field group, select the *Last name* and *First name* output fields. In the *Actions* field group, select the *Entry date* output field and the *Action type* and *Reason for action* selection fields.

   In the field group *Organizational Assignment*, choose the selection field *Personnel Area*. You require the further selection field *Entry date* in the field group *Actions* (to ensure that no person is hired for a special project BEFORE 1/1/99.

   Enter the following values: **CABB** for the personnel area, **01 Hiring** for the action type, **01/01/99** to **12/31/99** for the entry date, and **05 (special projects)** for the reason for action.

   Select *Other period* as the reporting period, and enter **01/01/1999** and **12/31/1999**. To select the appropriate persons, choose *Hit list.* Choose *Output*.

   Choose *Back* to return to the overview and delete all output and selection fields.

Task 6: Optional

STARTING STANDARD REPORTS

1. Use Ad Hoc Query to start the *Employee List* standard report (RPLMIT00) for all of the employees in either the CABB or 1000 Hamburg personnel area.

   a) In the field group *Organizational Assignment*, choose the selection criterion *Personnel Area*. Enter personnel area **CABB** or **1000**. Start selection by choosing *Hit List*. Choose *Goto⇒ Start Report*. Enter the standard report's technical name (RPLMIT00) in the window that is now displayed, and select *Start via selection screen*. Choose *Continue.*

   b) This takes you to the selection screen for the report, which you can execute for the persons you selected earlier.

Lesson Summary

You should now be able to:

- Output and export reports
- Save and reuse queries
- Perform set operations
- Explain how Ad Hoc Query is integrated in HR

Unit Summary

You should now be able to:

- Describe the principle of Ad Hoc Query
- Choose selection fields
- Enter selection values
- Output and export reports
- Save and reuse queries
- Perform set operations
- Explain how Ad Hoc Query is integrated in HR

Unit 38

1103

SAP Query

For more information, see the Instructor Guide in SAPNet.

Unit Overview

After completing this unit, you will be able to:

- Create and change HR-specific queries using SAP Query
- Include local fields in a query

Unit Objectives

After completing this unit, you will be able to:

- Create and change HR-specific queries using SAP Query
- Include local fields in a query

Unit Contents

Lesson: Defining Queries with SAP Query

1104

Lesson Duration: 70 Minutes

Lesson Overview

In this lesson, you learn how to define queries using SAP Query.

Lesson Objectives

After completing this lesson, you will be able to:

- Create and change HR-specific queries using SAP Query
- Include local fields in a query

For more information, see the Instructor Guide in SAPNet.

Business Example

- You have learned which reports are not covered by the standard reports.
- You have created customer and payroll infotypes that you want to report on.
- You use SAP Query to create the required reports.

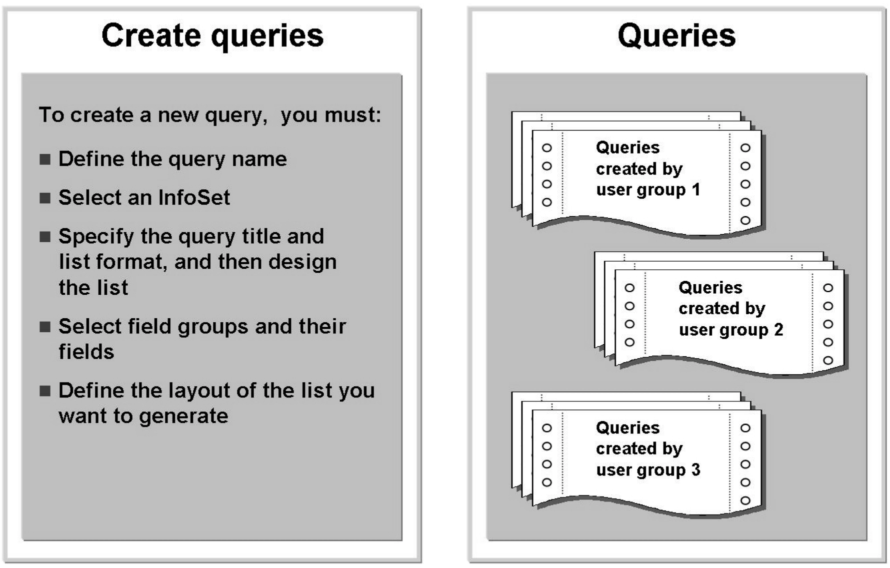


Figure 634: Creating Queries I

If you use SAP Query to create queries, note that you can create one basic list and up to nine statistics or ranked lists for one query (defined using selection and output fields).

When creating queries using HR logical databases, you can use the *Line Groups* function, which enables you to group specific lines together within multiline basic lists to form line groups. If infotypes have more than one record, this ensures that infotype fields which logically belong together are then grouped in a logical manner, instead of being output one after the other.

Without line groups:	**With line groups:**
Martin Smith	Martin Smith
54333 Musterstadt	54333 Musterstadt
12456 Anyplace	Any Street 4
Any Street 4	12456 Anyplace
Example Street 4	Example St. 4

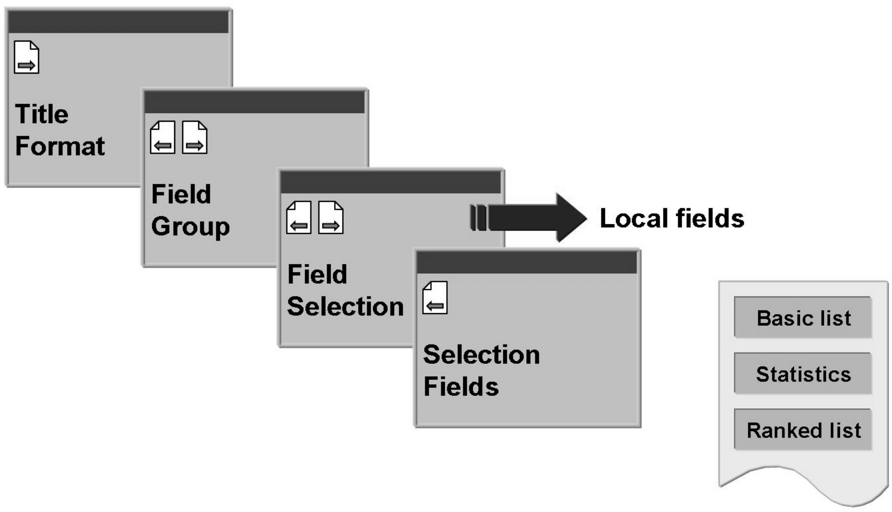


Figure 635: Creating Queries II

The system guides you through the following sequence of screens for field selection:

Title, Format:

The title of the query is assigned on this screen. By entering format data, you can determine the page layout. By entering special attributes, you can determine further characteristics for the query (for example, change lock, output types).

Field Group Selection:

InfoSets are divided into field groups, which correspond to infotypes in HR. You can select the required field groups at this point.

Field Selection (Output Fields):

This enables you to select the data fields required for the field groups selected earlier. If you require local fields, you can define them at this point.

Selection Fields:

You can define selection fields that enable you to enter further restrictions on the selection screen.

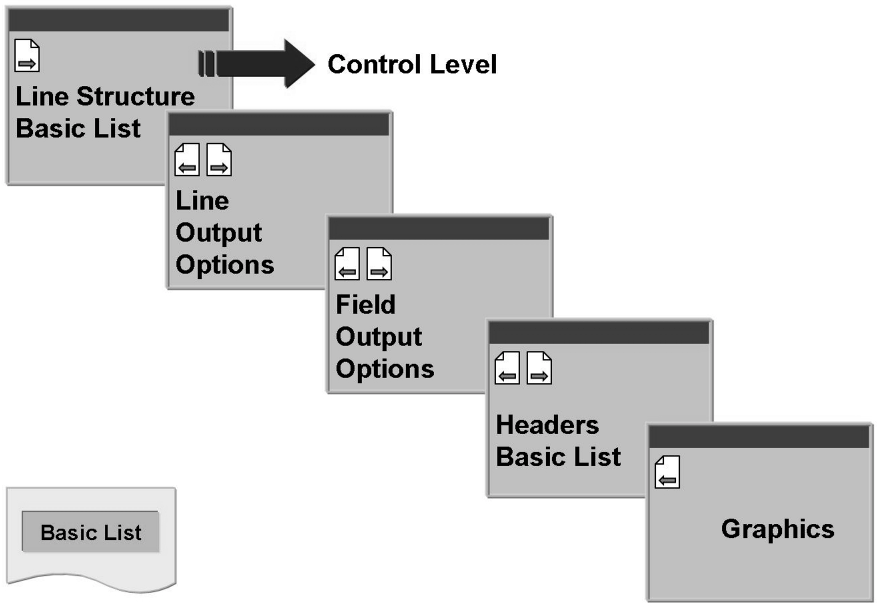


Figure 636: Creating Basic Lists

The following screens guide you through the process of creating a basic list:

Basic List Line Structure:

This screen enables you to arrange fields in single or multiple lines, and determine the field sequence. It also enables you to determine the sort sequence and other global field characteristics. Control level processing can be defined for sorted fields. Summation and field counting is possible for each control level.

List Line Output Options:

This screen enables you to determine output options for each line: output depending on whether another line exists, output for blank lines (before and after a line), page breaks, output in the page header.

Field Output Options:

This screen enables you to determine output options for each field: output length, output position, output with template (in this case, using an additional *Field Templates* screen).

Basic List Header

This screen enables you to enter a text for the footer and header, and to change the texts for column headers.

Graphic:

This screen enables you to determine the graphic type that is used if the list is output as a graphic.

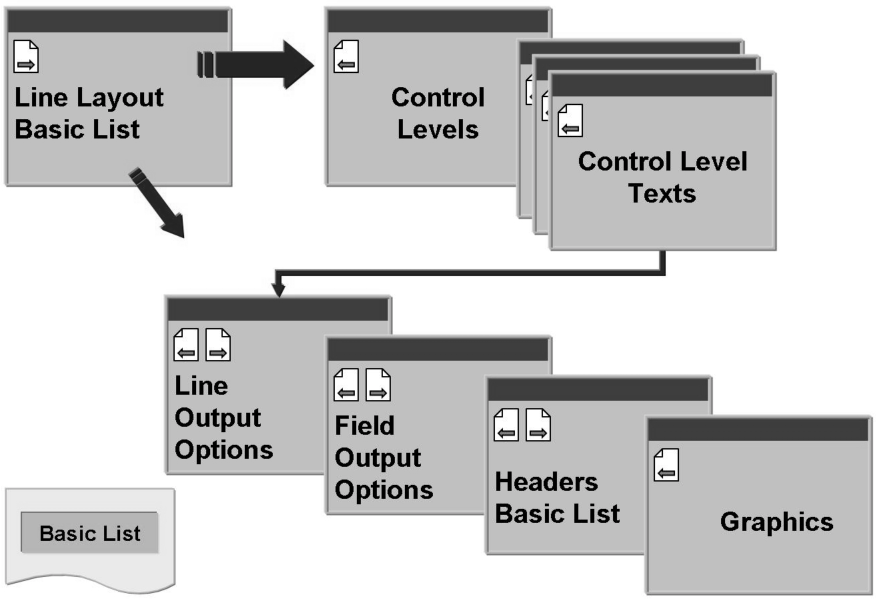


Figure 637: Creating Control Level Lists

If a sort sequence is specified for the line structure, the screen sequence branches to control level definition. The system then guides you through the following screens:

Control Levels:

- This screen enables you to determine the following attributes for each control level: ascending/descending control level sorting, use of an introductory control level text, summation, counting, frame, blank line, new page.
- If you use the summation function for a field, the total is output in the same column as the field, that is, with the same output length. This means that the output length is sometimes too short for outputting the total, which causes an overflow (an asterisk at the first position of the value). To avoid such overflows when totals are output, you can simply extend the output length of the field for which the summation function is used.

Control Level Texts (Totals Texts):

- This screen enables you to enter a text that is then output at the beginning of a control level (for a total). In the standard system, the text of the corresponding field is used.

The system takes you from this screen to the *List Line Output Options* screen, which has already been discussed in the context of defining basic lists.

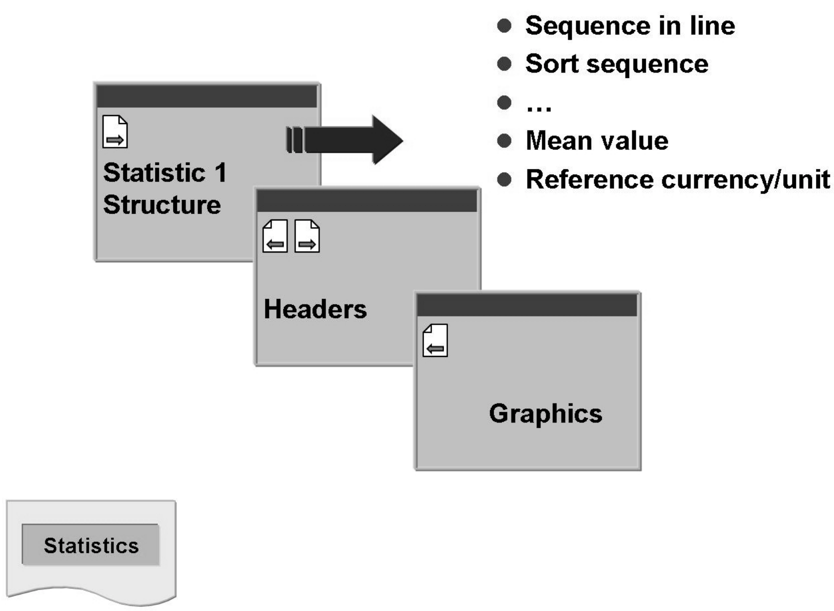


Figure 638: Creating Statistics

Statistics are used to perform analytical reporting for numerical data. The system does not merely output the values of numerical fields. Instead, it includes a summation function for the contents of fields, can count the number of processed records, and can output mean and percentage values. You are guided through the following screens for creating statistics:

Statistic 1 Structure (Statistic 2, etc.):

- Basic settings: field sequence, sort sequence, calculation of subtotals, field length, use of a field text for outputting a graphic.
- Settings for processing numerical fields: counting processed data records, mean values, the value as a percentage of the total, rounding.

Headers:

- This screen enables you to enter a text for the footer and header, and to change the texts for column headers.

The list includes the conversions performed by the system. If errors occur, the conversions that could not be performed are logged. The affected currency amount fields or quantity fields are also highlighted within the statistics.

Depending on the definition, subtotal lines can occur within statistics. As a result of summarized statistics display, the system only displays subtotals and the total.

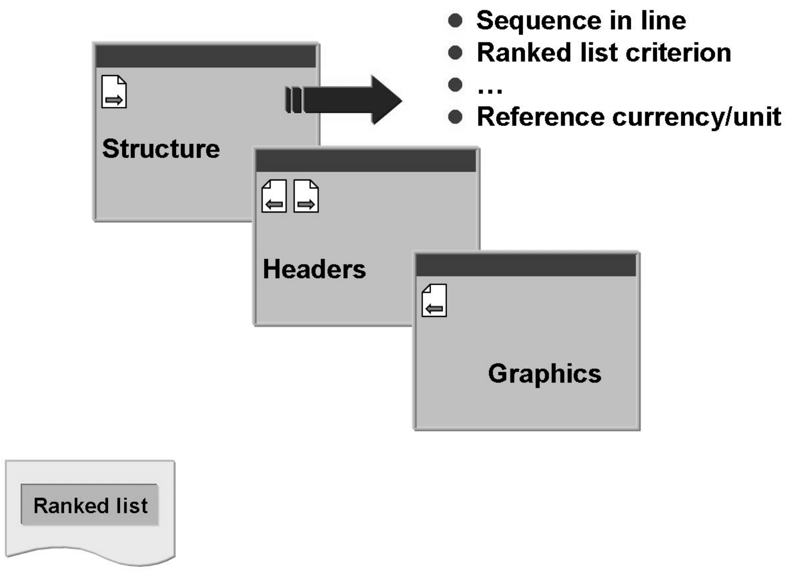


Figure 639: Creating Ranked Lists

Ranked lists are special types of statistics that are sorted in the standard system by the ten highest values of a numerical field. This means that you can only define one numerical field as a ranked list criterion for a ranked list. The system guides you through the following screens for creating ranked lists:

Ranked List 1 Structure (Ranked List 2, etc.):

On this screen, you make the following settings for ranked lists:

- Basic settings: field sequence, field length, use of a field text for outputting a graphic.
- Settings for processing numerical fields as a ranked list: specifying a ranked list criterion, rounding.

Headers:

- This screen enables you to enter a text for the footer and header, and to change the texts for column headers.

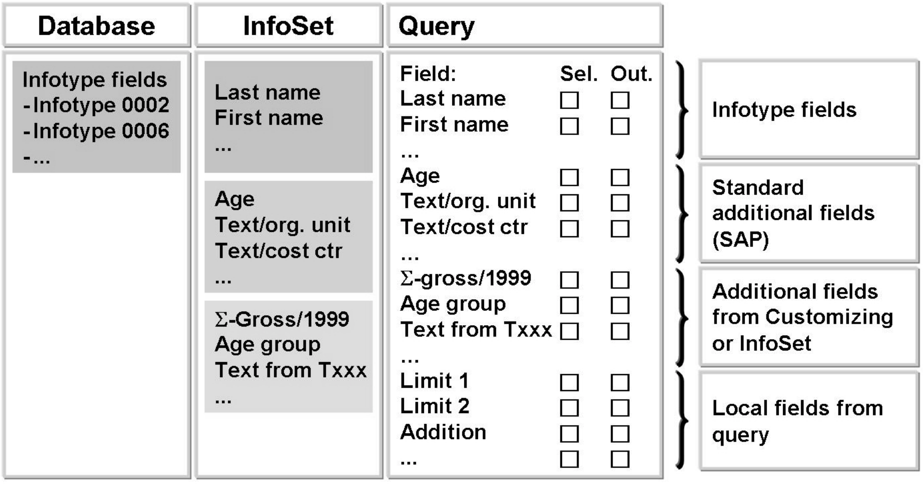


Figure 640: Additional Fields and Local Fields

The term **additional fields** covers all of the fields that do not exist in the database table of the corresponding infotype, but that are available for reporting purposes.

- **Standard additional fields** are additional fields that are required by the majority of customers, as experience has shown. For this reason, they are available in the standard system when InfoSets are created.
- Additional fields can also be defined by **customers** to meet special, company-specific requirements. They can be created in HR Customizing, or when an InfoSet is created. When they have been created in Customizing (under *HR Settings for SAPQuery ⇒ Additional Information for Maintaining InfoSets (Functional Areas) ⇒ Define Additional Fields*), they are always available when InfoSets are created. If they are created in an InfoSet, they are only available in that particular InfoSet.

Just like additional fields, **local fields** are used to meet specific requirements. They are defined within a query, and are only available for that query (for instance, in SAP Query).

1111

Exercise 47: Defining Queries with SAP Query

Exercise Duration: 60 Minutes

Exercise Objectives

After completing this exercise, you will be able to:

- Define queries using SAP Query, and output them as basic lists, statistics, and ranked lists.
- Define local fields in queries

Business Example

You want to create your own queries with the SAP Query tool.

Hint: Before doing the exercises, access the initial screen of the SAP Query and ***deactivate*** the Graphical Query Painter.

Hint: Unless otherwise specified, use the selection fields provided by the ***standard selection screen*** of the report class. Work in the ***standard work area*** in your user group ***HR580##*** with the Infoset ***HR580PNPMINI.***

Hint: Your instructor will not be able to go through all of the exercises with you. The following exercises are flagged as OPTIONAL.

Task 1:

Single-Line Basic List

With the InfoSet HR580PNPMINI, define a query **(Q1HR580##)** with a **basic list**, which outputs the following data:

Last name, first name, nationality, year of birth, and place of residence.

Please note the formatting specifications in the **model list:**

Last name (length 10)	**First name (length 10)**	**Nationality (length 2)**	**Year of birth (length 4)**	**Place of residence (length 15)**

1. Test the query for the personnel area 1000 Hamburg using the output form SAP List Viewer.
2. Change the query so that the basic ABAP list is surrounded by a frame, and the individual columns are separated from one another by lines. After you have made these changes, execute the query once again.
3. Once you have executed the query, display the SAP List Viewer. Set the SAP List Viewer up to include only employees whose place of residence is Heidelberg.

Continued on next page

Task 2:

Basic List with a Control Level

With the InfoSet HR580PNPMINI, define a query **Q2HR580##** with a basic list, which outputs the following data:

Organizational unit (text), last name, first name, payroll for-period, gross, and deductions.

Sample list:

Payroll records for <text for OU1>				
Last name (L: 10)	**First name** (L: 10)	**For-period** (L: 6)	**Gross** (L: 10)	**ER SI Expenses** (L: 10)
Miller	John	200412	13.000	6.000
...	...	...		
...	...	...		
Total for OU <text for OU1>			500,000 EUR	300,000 EUR
Payroll records for <text for OU2>				
...	...	...		
...	...	...		
...	...	...		

Further information on the output format (see sample list):

Define the *Organizational unit* field as a **control level**.

Display totals for the numerical fields using the organizational unit field.

Adapt the text for the control level and the total for the organizational unit in accordance with the sample list.

Adapt the length of the fields in accordance with the sample list.

1. Execute the query for the personnel area 1000 and for the evaluation period December of last year. Output the query once as an ABAP list, SAP List Viewer and once as a table.

Task 3: Optional

Basic List with Two Control Levels

1. Make a copy of query **Q2HR580##**, and call it **Q3HR580##**.

Continued on next page

Define the *Last name* field as a control level, and use the control level to calculate totals. Output the following text for the control level total: *Total for employees*.

Execute the query as an ABAP List for the personnel area 1000 and for the evaluation period October to December of last year.

Task 4:

Basic List with One Control Level and Statistics

1. Copy the **Query Q2HR580##** and rename it **Q4HR580##**. Define statistics with which the following data is output:

   - Total of evaluation wage type ***Gross*** per organizational unit

   - Total of evaluation wage type ***Deductions*** per organizational unit

   - *Percentage* of each total evaluation wage type for each organizational unit

   - *Average amount* within the organizational unit allotted for each employee (for both evaluation wage types)

   Sample list (header):

orga-niza-tional units	**Gross**	**Share as**	**mean value**	**ER SI share**	**Share as**	**mean value**
(L: 15)	(L: 12)	%		(L: 12)	%	

   Execute the query as an ABAP List for the personnel area 1000 and for the evaluation period December of last year.

Task 5: Optional

Basic List with One Control Level and Local Fields

Make a copy of query **Q2HR580##**, and call it **Q5HR580##**. Define a **local field** called *Net* for the new query that outputs the difference (gross amount - deductions). Include the field in the **basic list**.

1. Execute the query (personnel area 1000, period December last year). Output the query once as an ABAP List, once as a table, and once using the SAP List Viewer.
2. Define another local field for the query called *Limit*, and set it up to output a **green, yellow, or red** traffic light depending on the amount in the *Gross amount* field. Include the field in the basic list.

Continued on next page

Execute the query (personnel area 1000, period December last year). Output the query once as an ABAP List, and once using the SAP List Viewer.

Task 6: Optional

Multi-Line Basic List

1. Define a new query **Q6HR580##** based on the Infoset HR580PNPMINI with a multi-line basic list.

   Line 1 must include the *First name* (pos. 1/L=15) and *Last name* (pos. 2/L=15) fields. Line 2 must include the *Street and house number* (L=30) field. Line 3 must include the *Postal code* (pos. 1/L=10) and *City* (pos. 2/L=30) fields. Execute the query as an ABAP List for the personnel area 1000.

Solution 47: Defining Queries with SAP Query

Task 1:

Single-Line Basic List

With the InfoSet HR580PNPMINI, define a query **(Q1HR580##)** with a **basic list**, which outputs the following data:

Last name, first name, nationality, year of birth, and place of residence.

Please note the formatting specifications in the **model list:**

Last name (length 10)	**First name (length 10)**	**Nationality (length 2)**	**Year of birth (length 4)**	**Place of residence (length 15)**

1. Test the query for the personnel area 1000 Hamburg using the output form SAP List Viewer.

   a) Choose *Human Resources ⇒ Information System → Reporting Tools ⇒ SAP Query.*

   Ensure that you are in your user group **HR580##** (choose *Edit →Other user group*). Choose *Settings ⇒ Settings* and **deactivate** the Graphical Query Painter.

   b) Enter **Q1HR580##** as the short name of your query. Choose *Create* and in the query screen that appears, select the InfoSet *HR580PNPMINI.*

   Enter a title of your choice on the next screen. Choose *Next Screen*.

   Select the field groups *Personal data* and *Addresses*. Choose *Next Screen*.

   Select the fields *Last name, First name, Nationality, Year of birth* (field group *Personal Data*) and *City* (field group *Addresses*). Choose *Next Screen*.

   Choose Basic List to access basic list definition (you do not have to select any fields as selections fields)

   In the *Line* column, enter 01 for all fields (= one-line basic list) and define the column sequence as specified in the activity.

   Choose *Next Screen* twice.

Continued on next page

Specify the fields in accordance with the requirements of the activity. (Note too how the output preview changes in the lower part of the screen.)

Choose *Save.*

c) Choose *Query* → *Execute* ⇒ *Execute* and start the query for personnel area 1000.

2. Change the query so that the basic ABAP list is surrounded by a frame, and the individual columns are separated from one another by lines. After you have made these changes, execute the query once again.

   a) Navigate to the function for defining frames and separation lines on the *Basic List Line Structure* screen, and select the appropriate checkboxes.

   b) Choose *Query* → *Execute* ⇒ *Execute*, and start the query for personnel area 1000 Hamburg and the output form ABAP List.

3. Once you have executed the query, display the SAP List Viewer. Set the SAP List Viewer up to include only employees whose place of residence is Heidelberg.

   a) Choose *List* ⇒ *SAP List Viewer*, and select the *City* column.

   b) Choose *Edit* → *Set filter*, and enter *Heidelberg* as a filter value.

Task 2:

Basic List with a Control Level

With the InfoSet HR580PNPMINI, define a query **Q2HR580##** with a basic list, which outputs the following data:

Organizational unit (text), last name, first name, payroll for-period, gross, and deductions.

Sample list:

Payroll records for <text for OU1>				
Last name (L: 10)	**First name** (L: 10)	**For-period** (L: 6)	**Gross** (L: 10)	**ER SI Expenses** (L: 10)
Miller	John	200412	13.000	6.000
...	...	...		
...	...	...		
Total for OU <text for OU1>			500,000 EUR	300,000 EUR

Continued on next page

Payroll records for <text for OU2>				
...	...	...		
...	...	...		
...	...	...		

Further information on the output format (see sample list):

Define the *Organizational unit* field as a **control level**.

Display totals for the numerical fields using the organizational unit field.

Adapt the text for the control level and the total for the organizational unit in accordance with the sample list.

Adapt the length of the fields in accordance with the sample list.

1. Execute the query for the personnel area 1000 and for the evaluation period December of last year. Output the query once as an ABAP list, SAP List Viewer and once as a table.

   a) Enter **Q2HR580##** as the short name of your query. Choose *Create* and on the query screen that appears, select the InfoSet *HR580PNPMINI*.

   b) Enter a title of your choice on the next screen. Choose *Next Screen*.

   Select the field groups *Organizational Assignment, Personal* data and *Payroll Results*. Choose *Next Screen*.

   c) Select the fields *Organizational unit, Last name, First name, For period of payroll, Gross* and *ER SI expenses*. Choose Next Screen. Choose *Next Screen*.

   d) Choose basic list to access the screen for basic list definition.

   In the *Line* field, enter 01 for the *Last name, First name, For-period, Gross amount*, and *Deductions 01* (= single-line basic list), and define the sequence in accordance with the requirements of the activity. Enter sort position 01 for the *Organizational unit* field. Activate the *Total* checkbox for the *Gross amount and Deductions* fields. Choose *Next Screen*.

   e) Activate the *Text* and *Total* checkboxes for the organizational unit control level. Choose *Next Screen*.

   f) Enter *Payroll records* as an alternative text for the control level. Enter *Total for OU* as an alternative text for the total.

   g) Choose *Next screen* twice, and enter the field lengths in accordance with the requirements of the activity.

   h) Choose *Save*.

Continued on next page

i) Choose *Query* → *Execute* ⇒ *Execute*, and start the query for personnel area and reporting period specified in the exercise and the output forms specified.

Task 3: Optional

Basic List with Two Control Levels

1. Make a copy of query **Q2HR580##**, and call it **Q3HR580##**.

   Define the *Last name* field as a control level, and use the control level to calculate totals. Output the following text for the control level total: *Total for employees*.

   Execute the query as an ABAP List for the personnel area 1000 and for the evaluation period October to December of last year.

   a) To copy your query, choose *Copy* on the SAP Query initial screen. Choose *Change*.

   b) On the *Basic List Line Structure screen*, enter sort position 02 for the last name field. Choose *Next Screen*.

   c) Activate the *Total* for the *Last name* control level. Choose *Next Screen* twice.

      Enter *Total for Employee* as an alternativen text for the new control level total.

      Choose *Save*.

   d) Choose *Query* → *Execute* ⇒ *Execute* and specify the parameters as instructed in the exercise.

   e) Choose *Execute*.

Task 4:

Basic List with One Control Level and Statistics

1. Copy the **Query Q2HR580##** and rename it **Q4HR580##**. Define statistics with which the following data is output:

   - Total of evaluation wage type ***Gross*** per organizational unit

   - Total of evaluation wage type ***Deductions*** per organizational unit

   - *Percentage* of each total evaluation wage type for each organizational unit

   - *Average amount* within the organizational unit allotted for each employee (for both evaluation wage types)

   Sample list (header):

Continued on next page

organizational units	Gross	Share as	mean value	ER SI share	Share as	mean value
(L: 15)	(L: 12)	%		(L: 12)	%	

Execute the query as an ABAP List for the personnel area 1000 and for the evaluation period December of last year.

a) To copy your query, choose *Copy* on the SAP Query initial screen. Choose *Change*.

b) Within the new query **Q4HR580##**, choose Statistics 1 Structure to navigate to the *Statistics Structure* screen.

c) Enter a title and assign sequence numbers and field lengths to the fields *Organizational unit, Gross amount*, and *Deductions* fields according to the information in the sample list. Enter the reference currency EUR for numeric fields.

   Activate the *Mean value* and *Percentage share* options for the *Gross amount* and *Deductions* fields.

   Choose *Save*.

d) Choose *Query* → *Execute* ⇒ *Execute* and specify the parameters as instructed in the exercise.

   Choose *Execute*.

e) At the top of the output list you see the basic list, below you see the statistics.

Continued on next page

Task 5: Optional

Basic List with One Control Level and Local Fields

Make a copy of query **Q2HR580##**, and call it **Q5HR580##**. Define a **local field** called *Net* for the new query that outputs the difference (gross amount - deductions). Include the field in the **basic list**.

1. Execute the query (personnel area 1000, period December last year). Output the query once as an ABAP List, once as a table, and once using the SAP List Viewer.

   a) To copy your query, choose *Copy* on the SAP Query initial screen. Choose *Change*.

   b) Within the new query **Q5HR580##**, navigate to the *Field Selection* screen and activate the short names by choosing *Edit → Short Names*.

      Enter short names, such as GRS and DED, for the *Gross amount* and *Deductions* fields.

      Choose *Edit → Local Field ⇒ Create*.

      Enter a short name, field name, and header (such as GROSS).

      Use the properties to determine that the field has the same properties as the Gross amount (GRS) field.

      Enter the following calculation formula: GRS-DED (that is, using the short names you have entered) and choose *Continue*.

      Go to the basic list and on the screen *Basic List Line Structure* assign 1 to the local field Line, a sequence number, and select TOTAL.

      Choose *Save*.

   c) Execute the query with the parameters and output forms specified.

2. Define another local field for the query called *Limit*, and set it up to output a **green, yellow, or red** traffic light depending on the amount in the *Gross amount* field. Include the field in the basic list.

Continued on next page

Execute the query (personnel area 1000, period December last year). Output the query once as an ABAP List, and once using the SAP List Viewer.

a) Navigate back to the *Field Selection* screen. Choose *Edit → Local Field ⇒ Create* and create another local field *Limit* with the following attributes:

Characteristics: Icon

Button *Complex Calculation:*

Condition: BRT<=1000

Formula: ICON_GREEN_LIGHT

Condition: GRS>1000 AND GRS<=3000

Formula: ICON_YELLOW_LIGHT

Condition: BRT>3000

Formula: ICON_RED_LIGHT

b) Go to the basic list and on the screen *Basic List Line Structure* assign 1 to the local field Line, a sequence number.

c) Go to the screen *Output Options Field* and change the length of the field Net to 10.

d) Choose *Save* and execute the query with the parameters and output forms specified.

Task 6: Optional

Multi-Line Basic List

1. Define a new query **Q6HR580##** based on the Infoset HR580PNPMINI with a multi-line basic list.

Continued on next page

Line 1 must include the *First name* (pos. 1/L=15) and *Last name* (pos. 2/L=15) fields. Line 2 must include the *Street and house number* (L=30) field. Line 3 must include the *Postal code* (pos. 1/L=10) and *City* (pos. 2/L=30) fields. Execute the query as an ABAP List for the personnel area 1000.

a) Enter **Q6HR580##** as the short name of your query. Choose *Create* and in the query screen that appears, select the InfoSet *HR580PNPMINI*.

   Select the fields in accordance with the requirements of the activity.

b) Choose Basic List and on the *Basic List Line Structure* make the line and field sequence entries as instructed.

   On the *Field Output Options* screen, make appropriate entries for the field length.

c) Execute the query as an ABAP List for the personnel area 1000.

Lesson Summary

You should now be able to:

- Create and change HR-specific queries using SAP Query
- Include local fields in a query

Unit Summary

You should now be able to:

- Create and change HR-specific queries using SAP Query
- Include local fields in a query

Unit 39

1127

Payroll and Time Management Infotypes

For more information, see the Instructor Guide in SAPNet.

Unit Overview

After completing this unit, you will be able to:

- Describe the concept of payroll infotypes and simulated Time Management infotypes
- Set up payroll infotypes
- Include payroll infotypes and simulated Time Management infotypes in InfoSets

Unit Objectives

After completing this unit, you will be able to:

- Explain the concept of payroll infotypes
- Set up payroll infotypes
- Use payroll infotypes, that is, use payroll data from the clusters in your reporting activities
- Explain the concept of simulated infotypes in Time Management

Unit Contents

Lesson: Payroll Infotypes

1128

Lesson Duration: 40 Minutes

Lesson Overview

In this lesson, you learn about the payroll infotypes.

Lesson Objectives

After completing this lesson, you will be able to:

- Explain the concept of payroll infotypes
- Set up payroll infotypes
- Use payroll infotypes, that is, use payroll data from the clusters in your reporting activities

For more information, see the Instructor Guide in SAPNet.

Business Example

You want to report on payroll results:

- The results of specific wage types per employee, per personnel area, per organizational unit and so on.
- A list of all employees with an annual gross income exceeding 100,000.-.
- …

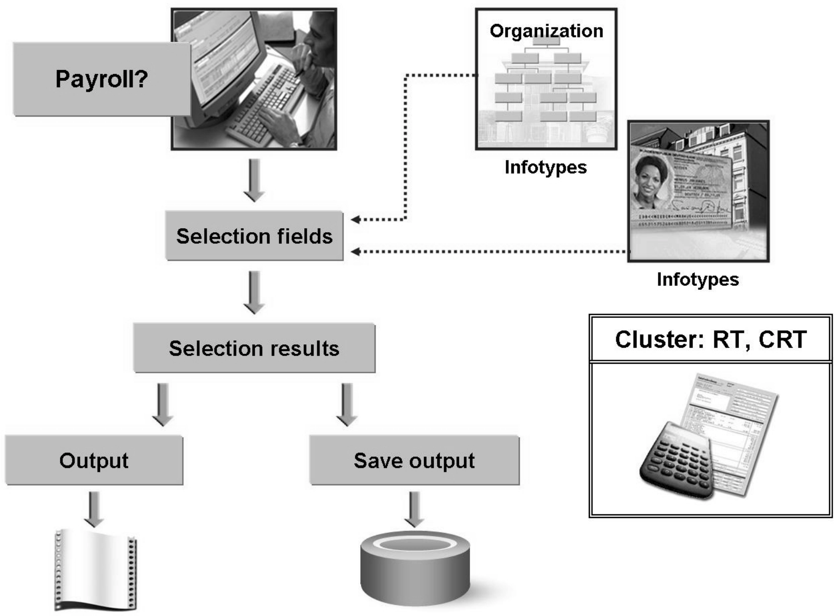


Figure 641: Reporting on Payroll Results I

Most *Human Resource* data is stored in infotypes. You can report on this data using standard reporting procedures (Ad Hoc Query or SAP Query). *Payroll* results, however, are stored in cluster tables. You can only report on them using specific standard reports or reports you have programmed yourself (that is, using the ABAP Editor/SE38).

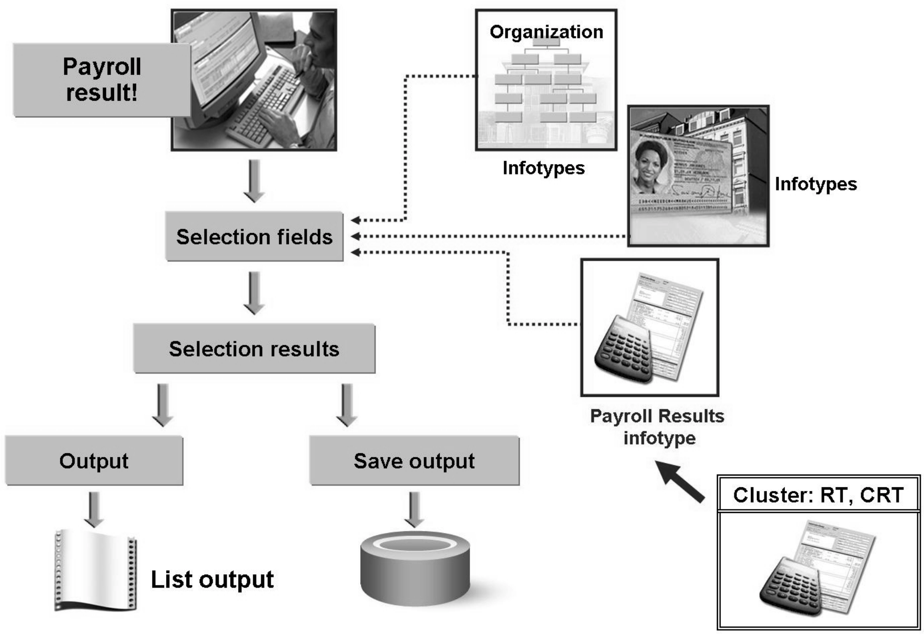


Figure 642: Reporting on Payroll Results II

To evaluate payroll results in the same way as other *HR* data, you can set up payroll infotypes.

Preconfigured payroll infotypes are available for this or you can define you own.

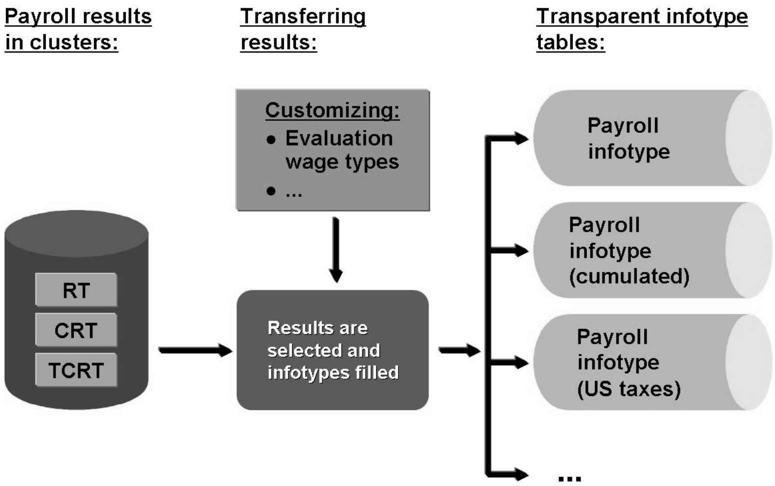


Figure 643: Structure of Payroll Infotypes

The basic principle of payroll infotypes (PIT) involves defining an infotype whose specific fields correspond to the results of one or more wage types in *Payroll*.

To enable the results of (technical) wage types to be aggregated, **evaluation wage types** (EWT) are defined in an intermediate step. They are used to define the payroll infotypes.

Example:

Wage types	EWT	PIT
/101 (Gross/Employee)	Gross/ER-EWT	Gross/ER-PIT
/262 (Gross/Social Contribution/ER)		

Technical wage types **/101** and **/262** are both written to evaluation wage type **Gross/ER-EWT**. In this case, the payroll infotype **Gross/ER-PIT** only contains this evaluation wage type.

Like all other infotypes in *Personnel Administration*, payroll infotypes have three **substructures** (key fields/PAKEY, administrative fields/PSHD1, infotype-specific fields/PSnnnn). The infotype-specific fields are contained in substructure PSnnnn. In the case of payroll infotypes, however, this structure contains additional, payroll-specific fields (sequence number, MOLGA, etc.) that are created automatically when a payroll infotype is created. The infotype-specific fields of a payroll infotype are contained in include CI_Pnnnn. These fields correspond to the evaluation wage types defined in Customizing.

Country-specific (USA) key fields in **preconfigured infotypes:**

The structure of infotypes that are preconfigured for the USA (0446, etc.) also contains the following key fields: TXCMP (tax interface) and TAXAU (tax authorities).

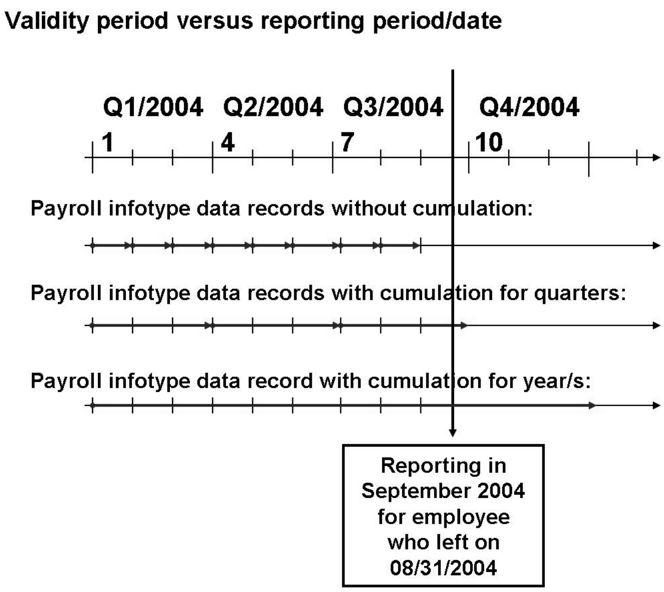


Figure 644: Cumulated Payroll Infotypes

Depending on the reports that you require, SAP advises that you cumulate payroll results, and then import them into payroll infotypes. In this case, you must define cumulated payroll infotypes. When defining cumulated payroll infotypes, take note of the fact that you can determine which amounts are included in the payroll infotype, and the number of infotype records that are created (in relation to the payroll period).

Payroll infotype data records **without cumulation**: each record contains the total paid for the corresponding payroll period.

Example (for employee):

Record 1 for period 012004: 3000 EUR

Record 2 for period 022004: 3200 EUR

....

Data records of a **cumulated payroll infotype** (annual cumulation). Each record always contains the cumulated values currently valid (payroll run at month end):

Record 1 for quarter 012004:	3000	Euro	**(on 01/31/04)**
Record 1 for quarter 012004:	6200	Euro	**(on 02/28/04)**
Record 1 for quarter 012004:	9200	Euro	**(as of 03/31/04)**
Record 2 for quarter 012004:	12200	Euro	**(on 01/31/04)**
Record 2 for quarter 012004:	15200	Euro	**(as of 02/28/04)**

...

When cumulated payroll infotypes are set up, you are no longer required to define the assignment to evaluation wage types. This assignment is taken from payroll infotypes that are not cumulated.

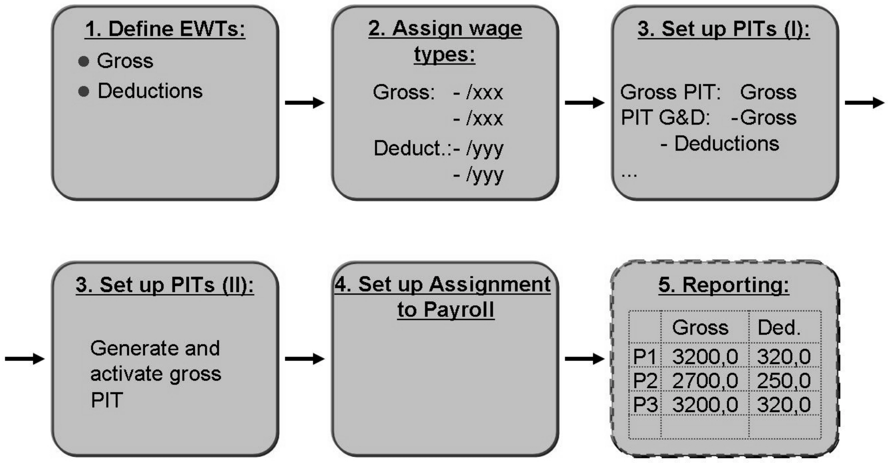


Figure 645: Creating a PIT (Overview)

You set up payroll infotypes in Customizing for *HR Information Systems*. In the Implementation Guide, choose:

Personnel Management → HR Information System → Payroll Results.

If you want to work with preconfigured payroll infotypes, you only need to perform some of the Customizing activities listed.

Eval. WT	Cum	Amount	No.	EWT text
Z101		●	○	Gross
Z101	M	●	○	Gross/M
Z101	Q	●	○	Gross/Q
Z101	Y	●	○	Gross/Y
Z262		●	○	Deductions
Z262	M	●	○	Ded./M
Z262	Q	●	○	Ded./Q
Z262	Y	●	○	Ded./Y
Z560		●	○	Payment
Z560	M	●	○	Payment/M
Z560	Q	●	○	Payment/Q
Z560	Y	●	○	Payment/Y
ZContrib1		●	○	Contrib.
		●	○	
		●	○	
		●	○	
		●	○	

1. **Define Evaluation Wage Types**
2. Assign Wage Types
3. Set up Payroll Infotypes
4. Set up Assignment to Payroll

- ID of evaluation wage type
- Cumulation type (year, ...)
- Text of evaluation wage type (→ field in SAP Query/Ad Hoc Query)
- Number/amount

Figure 646: 1) Defining Evaluation Wage Types

This step enables you to define evaluation wage types. The definition of evaluation wage types is country-specific (MOLGA).

Eval. WT	K	EWT Text	W.Type	Negative
Z101		Gross	/101	☐
Z101	M	Gross/M	/101	☐
Z101	Q	Gross/Q	/101	☐
Z101	Y	Gross/Y	/101	☐
Z262		Deductions	/262	☐
Z262	M	Ded./M	/262	☐
Z262	Q	Ded./Q	/262	☐
Z262	Y	Ded./Y	/262	☐
ZContrib		Contrib.	1000	☐
ZContrib	M	Contrib.	1100	☐
ZContrib	Q	Contrib.	1200	X
ZContrib	Y	Contrib.	1200	☐
				☐
				☐
				☐
				☐
				☐

1. Define Evaluation Wage Types
2. **Assign Wage Types**
3. Set up Payroll Infotypes
4. Set up Assignment to Payroll

EWT: wage type
1: n

Figure 647: 2) Assigning Wage Types

This step enables you to determine the (technical) wage types that are entered in an evaluation wage type.

Generate Payroll Infotype			
IType	Eval. WT	K	EWT Text
9580	Z101		Gross
9580	Z101	M	Gross/M
9580	Z101	Q	Gross/Q
9580	Z101	Y	Gross/Y
9584	Z262		Deductions
9584	Z262	M	Ded./M
9584	Z262	Q	Ded./Q
9584	Z262	Y	Ded./Y

1. Define Evaluation Wage Types
2. Assign Wage Types

3.a Set up Payroll Infotypes: assign and generate evaluation wage types

4. Set up Assignment to Payroll

- Enter infotype from customer namespace **9nnn** or use preconfigured PIT
- Assign evaluation wage types
- Generate

Figure 648: 3) Setting Up Payroll Infotypes I

This step enables you to define the payroll infotype by assigning evaluation wage types to it and then generating.

The appropriate screens and tables are generated in accordance with the evaluation wage types you assigned.

Hint: You can only use entries from the customer namespace (9nnn) as infotype numbers.

IType	I	K	IT Text	Gen.	Act.	IType
9580			Gross	x		
9581		M	Gross/M			9580
9582		Q	Gross/Q			9580
9583		Y	Gross/Y			9580
9584			Deductions			
9585		M	Ded./M			9584
9586		Q	Ded./Q			9584
9587		Y	Ded./Y			9584
			Contrib.			
			Contrib.			
			Contrib.			
			Contrib.			

1. Define Evaluation Wage Types
2. Define Wage Types

3.b Set up Payroll Infotypes: set PIT to active

4. Set up Assignment to Payroll

- Set infotype to **active**
- Enter infotype for automatic data retrieval OR use report RPABRI00 to fill with data manually

Figure 649: For 3) and 4) Setting Up Payroll Infotypes (II) and Setting Up Payroll Assignment

This step enables you to set the generated payroll infotype to active.

Once the PIT has been set to active, you can test it to make sure it functions correctly.

Perform the following steps:

- Transfer payroll results manually from payroll cluster tables to the payroll infotype (RPABRI00).
- Display the contents of the corresponding database tables (PA9*) using SE16, and compare the values with the values in the payroll clusters (with RPCLSTRD for Germany, for example).
- Display the values in the payroll infotype fields using the HR master data of the corresponding persons.

To ensure that the payroll infotype is filled with data automatically, enter the payroll infotype in the *Set up Assignment to Payroll* Customizing activity.

1135 Exercise 48: Payroll Infotypes

Exercise Duration: 30 Minutes

Exercise Objectives

After completing this exercise, you will be able to:

- Create payroll infotypes
- Fill payroll infotypes
- Include payroll infotypes in InfoSets, and use them in queries.

Business Example

You want to define and fill a payroll infotype so as to be able to access payroll results using Ad Hoc Query and SAP Query.

Task 1:

Create a payroll infotype (PIT) **96##** for the country grouping *01 Germany*. The PIT must include two evaluation wage types (EWT). Therefore, you need to perform the activities described in the following sections.

1. Define evaluation wage types and enter the following parameters and names:

Abbr.	Cumulation	Amount or number	Text
Z1##	-	**Amount**	**Gr##: Gross**
Z2##	-	**Amount**	**Gr##: Deductions**

2. Assign the following wage types to these evaluation wage types (country grouping 01):

   Z1## consists of the wage type **/101 Gross amount**.

   Z2## consists of the wage type **/262 Average employer expense SI**.

3. Assign these evaluation wage types to infotype **96##** and generate the payroll infotype. Don't forget to activate it.

Task 2:

To fill the infotype you just created with payroll results, start report **RPABRI00** for the personnel area 1000 (Hamburg), the period December of last year, and payroll infotype **96##.**

1. Check three records of a person to ensure that the payroll infotype was filled with correct results.

Continued on next page

Task 3: Optional

1. Include the payroll infotype 96## you created in your InfoSet (PA_##) and create a query that outputs the payroll results.

Solution 48: Payroll Infotypes

Task 1:

Create a payroll infotype (PIT) **96##** for the country grouping *01 Germany*. The PIT must include two evaluation wage types (EWT). Therefore, you need to perform the activities described in the following sections.

1. Define evaluation wage types and enter the following parameters and names:

Abbr.	Cumulation	Amount or number	Text
Z1##	**-**	**Amount**	**Gr##: Gross**
Z2##	**-**	**Amount**	**Gr##: Deductions**

   a) Use the SAP Easy Access Menu to access the Implementation Guide (IMG):

      Tools→ Customizing→ IMG→ Edit Project

      In the SAP Reference IMG, choose:

      Personnel Management → Human Resources Information System → Payroll Results

   b) Access the *Define Evaluation Wage Types* customizing activity.

      Enter the country grouping 01 Germany.

   c) Choose *New entries*.

   d) Make the following entries and selections in the fields for each evaluation wage type:

Abbr.	*Cumulation*	*Amount or number*	*Text*
Z1##	-	**Amount**	**Gr##: Gross**
Z2##	-	**Amount**	**Gr##: Deductions**

   e) Save your entries. If a workbench request prompt is displayed, enter any existing request (or create one).

2. Assign the following wage types to these evaluation wage types (country grouping 01):

   Z1## consists of the wage type **/101 Gross amount**.

Continued on next page

Z2## consists of the wage type **/262 Average employer expense SI**.

a) Access the *Assign Wage Types* customizing activity.

b) When asked to specify a *country grouping*, select ***01*** (Germany).

c) Choose *New entries*.

d) To assign evaluation wage type Z1XX, make the following entries:

Eval.WT:	**Z1##** (use the input help function)
Cumulation:	**No entry**
Wage type:	**/101**
EWT text:	**Entry is made automatically**

e) To assign evaluation wage type Z2##, make the following entries:

Eval.WT:	**Z2##** (use the input help function)
Cumulation:	**No entry**
Wage type:	**/262**
EWT text:	**Entry is made automatically**

f) Save your entries.

Continued on next page

3. Assign these evaluation wage types to infotype **96##** and generate the payroll infotype. Don't forget to activate it.

   a) Access the *Set up Payroll Infotypes* customizing activity.

   b) In the Payroll Infotypes view, choose *New entries*.

   c) Make the following entries:

IType:	**96##**
Inftyp. Type:	**No entry**
Cumulation:	**No entry**
Infotype Text:	**Entry is made automatically**
Generated:	**Entry is made automatically**
Active:	**No entry**
Infotype:	**No entry**

   d) Select your *payroll infotype* **96##.**.

   e) Double-click the *Assign Evaluation Wage Types* view. Confirm the country grouping 01 Germany and infotype *96##.*.

   f) Choose *New entries*.

   g) Make the following entries:

IType:	**96##** (use the input help function)
Eval.WT:	**Z1##** (use the input help function)
EWT text:	**Entry is made automatically**

   Repeat these entries for EWT Z2##.

   h) Choose *Save* and *Generate Payroll Infotype*. If you are asked for the object catalog, select *Local Object* and choose *Continue*.

   i) Choose *Back* to return to the PIT Overview.

   j) Set your infotype *96##* to *active*.

   k) Save your entries.

Continued on next page

Task 2:

To fill the infotype you just created with payroll results, start report **RPABRI00** for the personnel area 1000 (Hamburg), the period December of last year, and payroll infotype **96##.**

1. Check three records of a person to ensure that the payroll infotype was filled with correct results.

   a) Access the ABAP Editor. To do so, choose *System →Services→ Reporting.*

   Start report RPABRI00 with the following values:

Other period:	**December of last year**
Personnel area:	**1000**
Infotype:	**96##**

   b) To test the infotype:

   Open the HR master data maintenance transaction in one session, and display the records of infotype *96##* for the corresponding person.

   In a second session, choose *System →Services→ Reporting* to start the report for displaying payroll results (H99_DISPLAY_PAYRESULT). Enter the relevant personnel number and display payroll results for the period concerned. Check in particular the amounts from table *RT.*

Task 3: Optional

1. Include the payroll infotype 96## you created in your InfoSet (PA_##) and create a query that outputs the payroll results.

   a) Choose *Tools → ABAP Workbench → Utilities → SAP Query → Infoset*.

   b) Select your Infoset PA_## and choose *Change*. In InfoSet maintenance mode, choose *Edit → Change Infotype Selection* and select the infotype *96##* you just generated. Generate your Infoset again.

   c) Choose *Human Resources → Information System → Reporting → Tools → Ad Hoc Query.* Based on the InfoSet PA_##, define a query that displays payroll results.

Lesson Summary

You should now be able to:

- Explain the concept of payroll infotypes
- Set up payroll infotypes
- Use payroll infotypes, that is, use payroll data from the clusters in your reporting activities

Lesson: Simulated infotypes in Time Management

1142

Lesson Duration: 20 Minutes

Lesson Overview

In this lesson, you learn about simulated infotypes in Time Management.

Lesson Objectives

After completing this lesson, you will be able to:

- Explain the concept of simulated infotypes in Time Management

For more information, see the Instructor Guide in SAPNet.

Business Example

For reporting purposes, you want to have time evaluation results together with information from Time Management infotypes presented in an easy-to-use form.

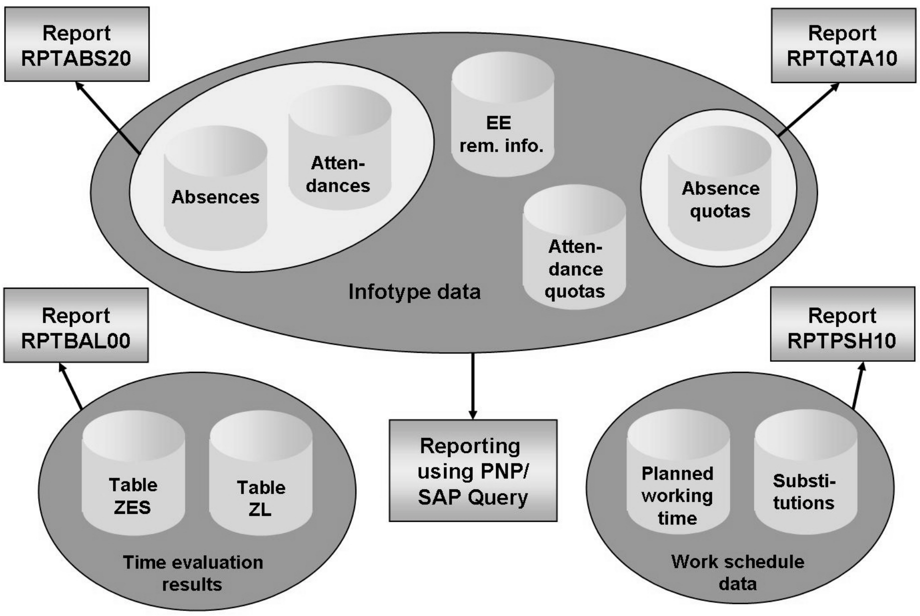


Figure 650: Time Management Reporting Without Simulated Infotypes

The time management data is stored in the various infotypes and in cluster B2 (time evaluation results).

Standard reports enable you to report on individual data sources. For example, you can report on infotype data (report RPTABS20) or cluster data (report RPTBAL00). However, they do not enable you to report on infotype data *and* cluster data. Therefore, standard reports can restrict you because they only enable you to report on some of the data relevant to your business.

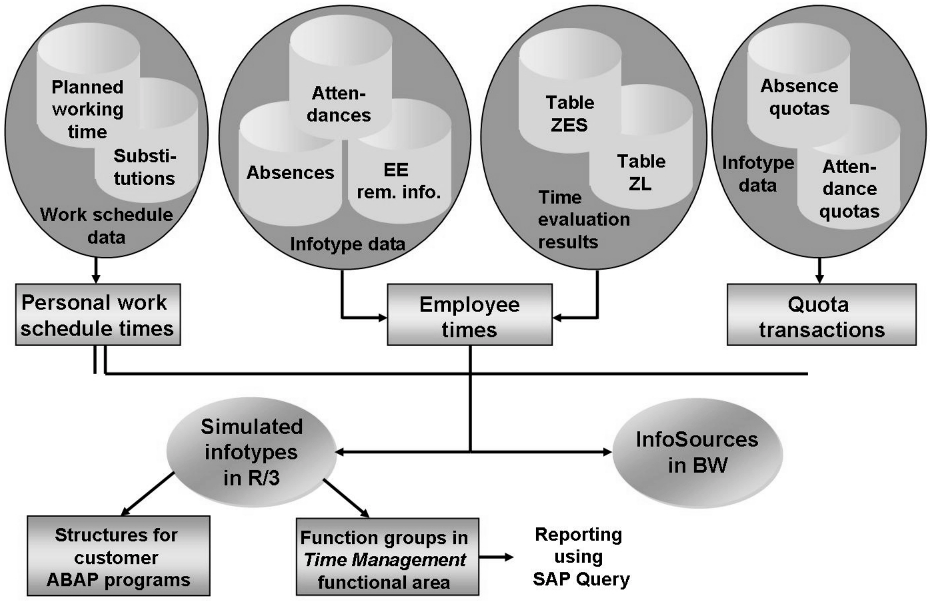


Figure 651: Time Management Reporting With Simulated Infotypes

As of release 4.6, you can also use business-oriented BW structures (InfoSources) in R/3 as *simulated infotypes*.

Simulated infotypes facilitate reporting on a new business level. The infotype concept is used to retrieve data in a user-friendly manner from a variety of data sources (infotype data, time evaluation results, data from the personal work schedule). For example, they enable *infotype structures* to be used to read and report on *cluster data* (cluster tables ZES, ZL with ALP and C1).

Therefore, the infotypes are *simulated* because infotype data is not stored in an infotype database table, as is usually the case. Instead, it is retrieved from a variety of database tables at runtime by a function module in Time Management.

Just like other infotypes, *simulated infotypes* are available in logical database PNPCE. This means that they can be used like other infotypes for customer ABAP programs and reporting with SAP Query.

Hint: In the past, reports had to count attendance or absence records themselves if they were executed for attendances or absences lasting several days (and in particular, for attendances or absences lasting beyond the reporting period). This problem does not occur when *simulated infotypes* are used because attendance and absence records are counted each day and retrieved accordingly.

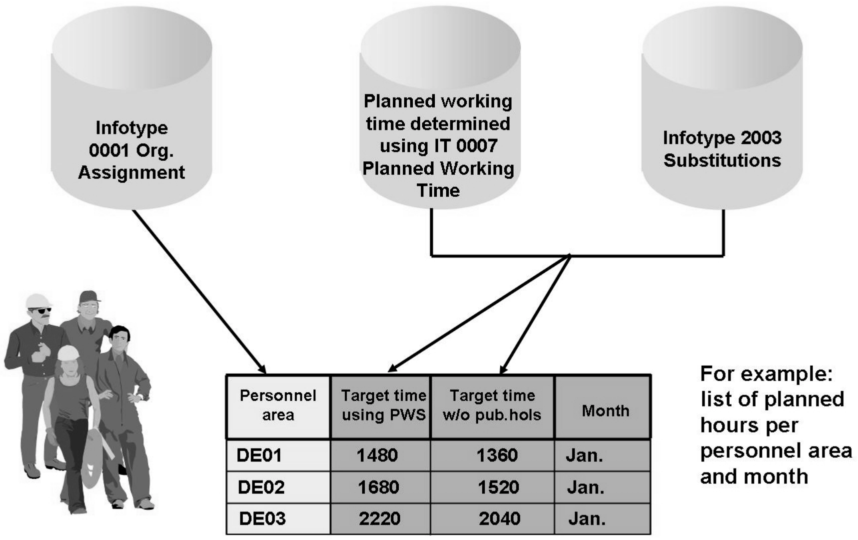


Figure 652: Simulated Infotype: Personal Work Schedule (2500)

Simulated infotype 2500 *Personal Work Schedule Times* includes the following data:

- Data from infotypes 0001 *Organizational Assignment* and 0007 *Planned Working Time*
- Additional information, such as target time according to the personal work schedule and target time without public holidays

Target time is determined using the following data:

- Daily work schedule (which is determined using the appropriate work schedule rule from infotype 0007 *Planned Working Time*)
- Employment percentage from infotype 0007 *Planned Working Time*
- *Substitutions* infotype (2003)

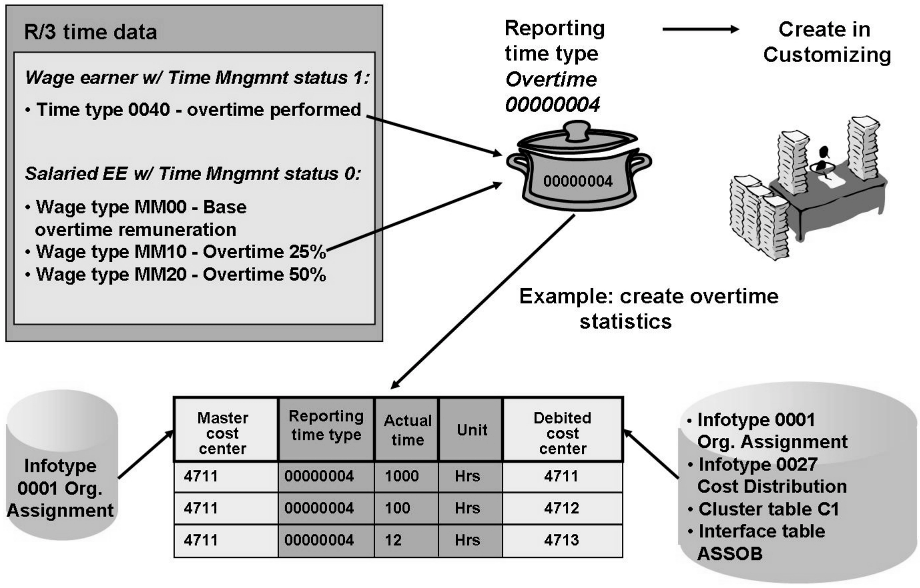


Figure 653: Simulated Infotype Employee Times (2501)

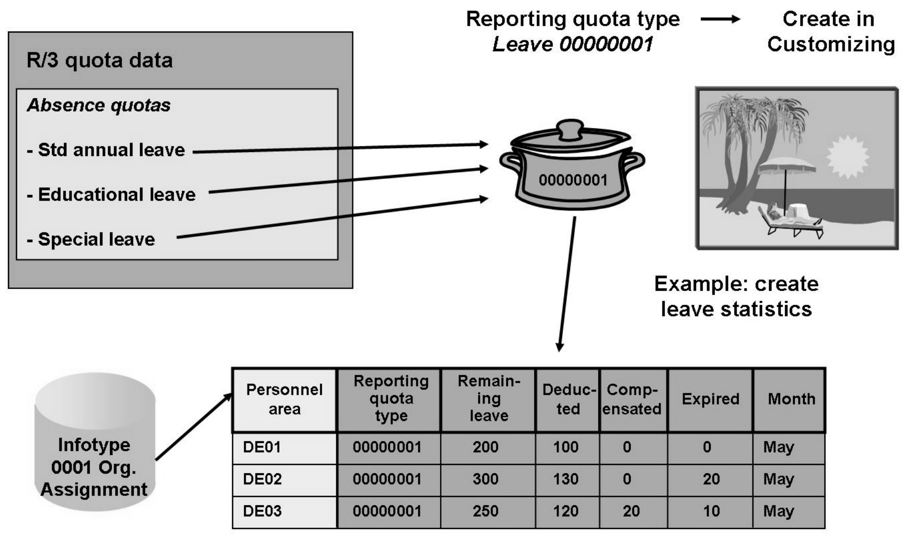
Simulated infotype 2501 *Employee Times* includes the following data:

- Data from infotypes 0001 *Organizational Assignment* and 0007 *Planned Working Time*
- Employee time data, such as the *reporting time type* (field REPTT) with the number of hours and days
- Cost assignment data
- Activity allocation data
- *Different payment* data

The new term *reporting time type* facilitates a standard view of employee times from a variety of Time Management datasets (attendances, absences, employee remuneration information, time evaluation results from tables ZES, ZL, C1, and ALP of cluster B2).

You create the reporting time type in Customizing, and use it to group required time data together.

For example, you can use a reporting time type to create overtime statistics that are based on overtime data from different data sources.



Personnel area	Reporting quota type	Remain-ing leave	Deduc-ted	Comp-ensated	Expired	Month
DE01	00000001	200	100	0	0	May
DE02	00000001	300	130	0	20	May
DE03	00000001	250	120	20	10	May

Figure 654: Simulated Infotype Quota Transaction (2502)

Simulated infotype 2502 *Quota Transaction* includes the following data:

- Data from infotypes 0001 *Organizational Assignment* and 0007 *Planned Working Time*
- Quota transaction data:
  - *Reporting quota type* (field QUOTA)
  - Data from infotype 2006 *Absence Quotas*
  - Data from infotype 2007 *Attendance Quotas*

The new term *reporting quota type* facilitates a standard view of quota data from a variety of Time Management datasets (attendance quotas, absence quotas).

You create the reporting quota type in Customizing, and use it to group required quota data together.

For example, you can use a reporting quota type to create leave statistics that are based on a variety of absence quotas.

Hint: The simulated *Quota Transaction* infotype also takes data from infotype 0005 *Leave Entitlement* into account.

Facilitated Discussion

Discussion Questions

Use the following questions to engage the participants in the discussion. Feel free to use your own additional questions.

Lesson Summary

You should now be able to:

- Explain the concept of simulated infotypes in Time Management

Unit Summary

You should now be able to:

- Explain the concept of payroll infotypes
- Set up payroll infotypes
- Use payroll infotypes, that is, use payroll data from the clusters in your reporting activities
- Explain the concept of simulated infotypes in Time Management

Unit 40

1149

HCM in BW and SEM

For more information, see the Instructor Guide in SAPNet.

Unit Overview

At the conclusion of this unit, you will be able to:

- Give a general overview of how the Business Information Warehouse is used in HCM
- Provide detailed knowledge of the business content of InfoCubes, queries, and key figures available in HCM
- Execute HCM queries
- Outline the role of HCM in Strategic Enterprise Management

Unit Objectives

After completing this unit, you will be able to:

- Give a general overview of the Business Information Warehouse in the area of HCM.
- Provide details of the business content of the InfoCubes, queries and key figures available in HCM.
- Execute HR queries.
- Give an overview of HCM in Strategic Enterprise Management.

Unit Contents

Lesson: Overview of HCM in the Business Information Warehouse (BW)

1150

Lesson Duration: 40 Minutes

Lesson Overview

This lesson gives you an overview of the HCM Content in BW.

Lesson Objectives

After completing this lesson, you will be able to:

- Give a general overview of the Business Information Warehouse in the area of HCM.
- Provide details of the business content of the InfoCubes, queries and key figures available in HCM.
- Execute HR queries.

For more information, see the Instructor Guide in SAPNet.

Business Example

Management regularly requires key figures from Human Resources.

The Business Information Warehouse enables you, an employee in the HR Analysis Department, to provide authorized persons with the up-to-date key figures and reports they require using an Internet/intranet browser when they require them.

Basics

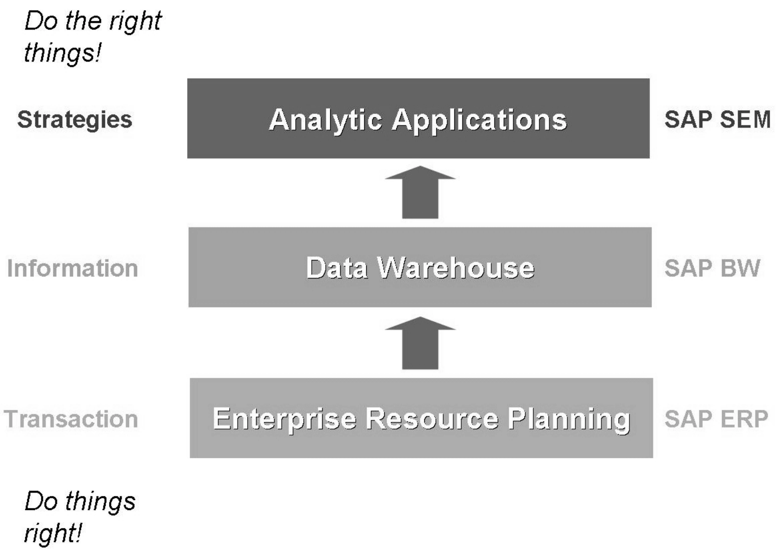


Figure 655: HCM in BW and SEM: Overview

A data warehouse is a standalone application environment with its own database containing information taken from different data sources. It is designed for queries and analyses. The **Business Information Warehouse**

- Combines state-of-the-art data warehouse technology with SAP's business know-how.
- Is a standalone system with its own release cycle.

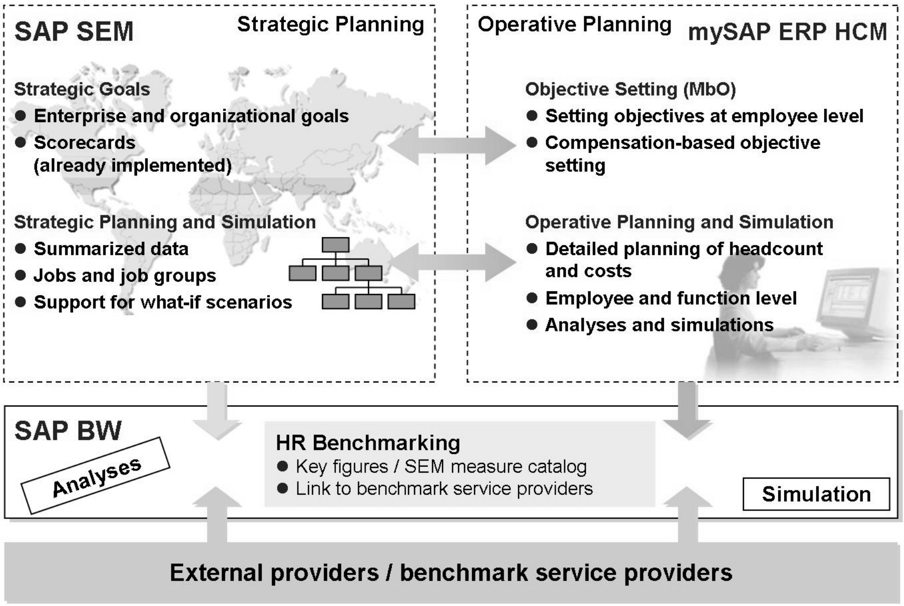


Figure 656: HR Analytics

Human Resources Analytics combines the strategic planning of mySAP SEM with the operative planning of mySAP ERP HCM to provide integrated Business Content for extensive analyses and benchmarking.

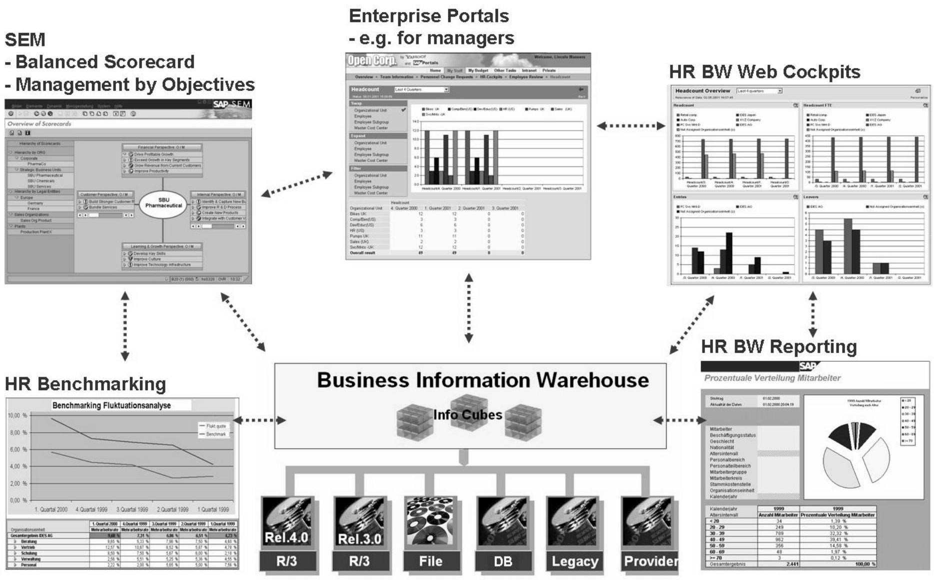


Figure 657: HCM BW Business Content as a Basis for Business Intelligence

Data from BW is used as a basis in multiple different ways.

Business Information Warehouse Overview

- **Definition of a Data Warehouse**
  - A data warehouse is a standalone application environment containing information taken from different data sources. It is designed for queries and analyses.
- **The Business Information Warehouse**
  - Combines state-of-the-art data warehouse technology with SAP's business know-how.
  - Is a standalone system with its own release cycle.

Decision makers urgently require reliable information from Production, Purchasing, Sales, Financial Accounting, and Human Resources. They need an up-to-date and comprehensive overview of a given business area, and also of the whole business environment. This necessitates highly efficient and reliable data retrieval from relevant data sources.

Information must be collated at a central point from which all data can be accessed.

Efficient analysis technologies with meaningful, multimedia display options are indispensable. The information needs of a wide variety of user groups must be satisfied.

Advantages of BW:

- Standardized structure and display for all enterprise data
- Easy access to enterprise data via single point of entry
- Highly sophisticated reporting for analyses
- Environment conducive to high performance
- Data retrieval from heterogeneous environment

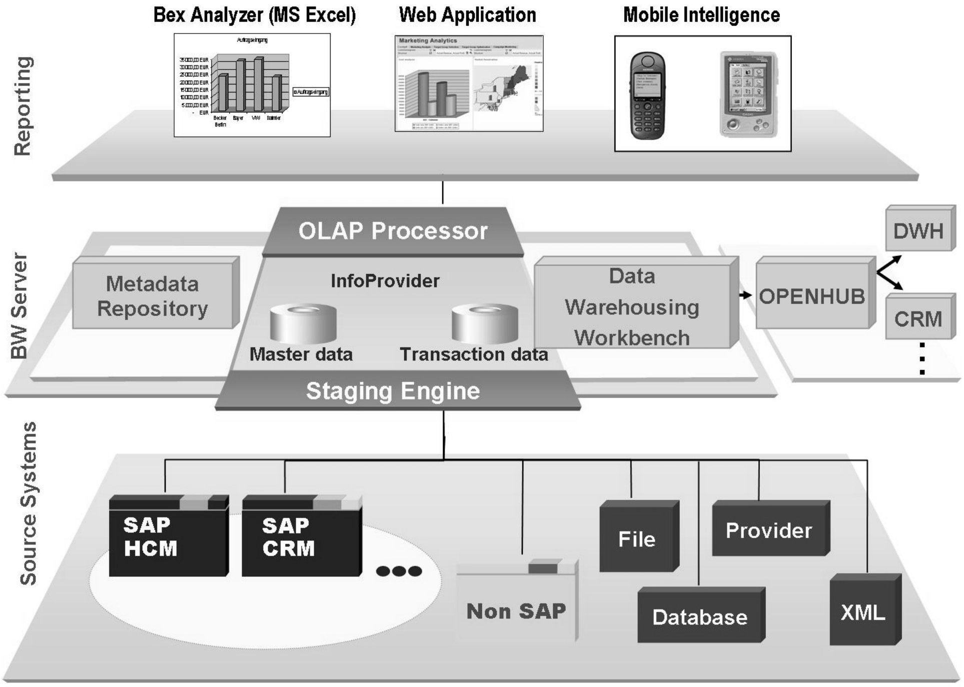


Figure 658: Components of the Business Information Warehouse

The three main constituent parts of the Business Information Warehouse are the Business Information Warehouse Server, the Data Warehousing Workbench, and the Business Explorer.

This graphic provides you with an overview of the structure of the SAP Business Information Warehouse in a heterogeneous system landscape. At the lowest level, source systems may be SAP systems and non-SAP systems. Reporting can be done using data extracted from SAP systems, non-SAP systems, or from external sources such as databases, online services, and the Internet.

Extractors (programs that enable data extraction) are used to retrieve data from the SAP system. HR extractors are delivered for HR as Business Content.

This data is managed in the **Business Information Warehouse**.

The **Data Warehousing Workbench** is an easy-to-use, central administrative tool. Among its other uses, it manages the various source systems.

Using the **Business Explorer**, reports can be displayed in MS Excel, analyzed, and processed.

The **OLAP** (Online Analytical Processing) **Processor**

- Executes queries and generates different views of a query
- Facilitates horizontal, vertical, and hierarchical “drilldowns”
- Enables you to exchange characteristics (navigation)
- Has different aggregation functions (total, numerator, min. / max., first / last, ...), comparison (deviation, ratio, percentage...), sequences (sorting, cumulated totals, time series, values,...) and currency conversion

InfoCubes

- InfoCubes contain InfoObjects (two types of data):
  - Key figures

    (quantifiable values, such as the number of employees)
  - Characteristics

    (required to determine key figures in accordance with different criteria; organizational unit and gender are examples of characteristics for the number of employees)

Data is stored and displayed in InfoCubes.

InfoCubes are n-dimensional data stores that are used for reporting.

An InfoCube contains InfoObjects, which consist of characteristics and key figures.

The structure of an HR InfoCube is comparable with an InfoSet in Ad Hoc Query or SAP Query.

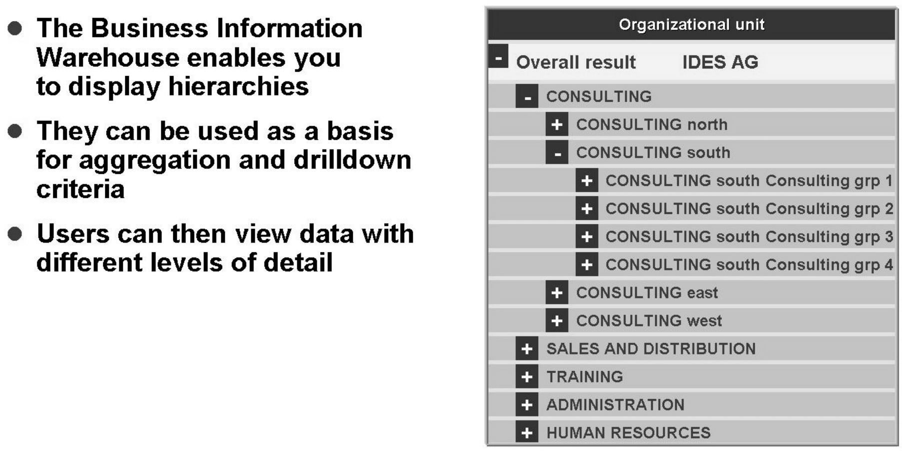


Figure 659: Hierarchies

Hierarchies are delivered in HR for the following, for example:

- Organizational structure
- Cost centers
- Business events/business event groups
- Qualifications/qualification groups
- Age structure
- Capacity utilization level

You can also create your own hierarchies.

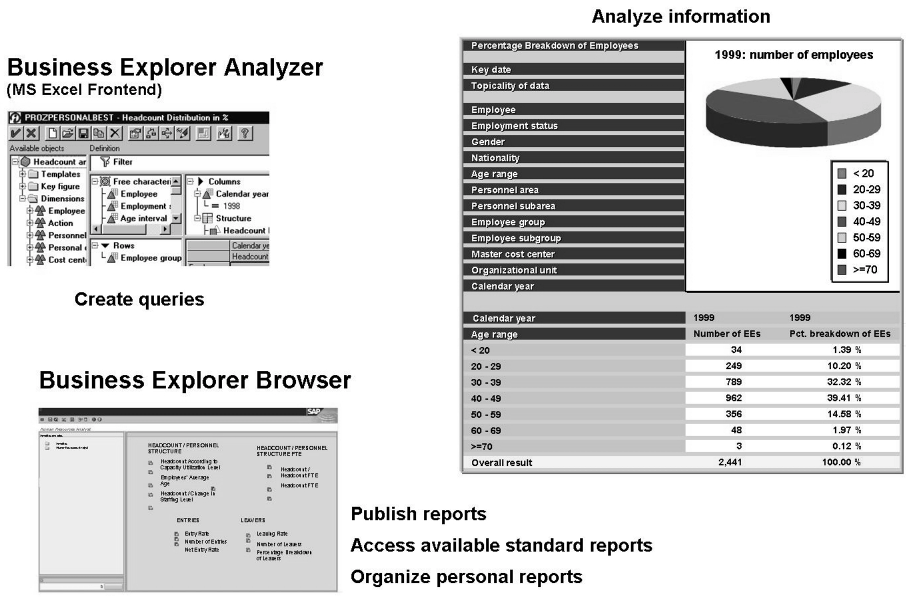


Figure 660: Business Explorer

The Business Explorer is used to report on, analyze, and display data.

The Business Explorer enables you to define queries, which are based on a selection of InfoObjects or predefined query structures from an InfoCube.

By navigating queries, you create different views of data. This enables you to analyze and display InfoCube data.

The Business Explorer is a comprehensive base of information for a variety of users from all areas of an enterprise. It supports standardized reporting, ad hoc queries, special reports, and individual online analyses. It also contains a graphical report catalog.

The Business Explorer Browser can retrieve queries via the Internet or intranet.

The user simply accesses tables, graphics, and business reports that are displayed in Excel.

HCM Business Content in BW

Users of Business Information Warehouse in HR

- Management/heads of department
- HR department
- User departments

  (such as Controlling, Administration)

BW provides you with operational data from a variety of areas within an enterprise. Reports can be used to process data for decision-making or information purposes.

Standard determination of key figures facilitates benchmarking between different enterprises, or within a single enterprise.

Comparative key figures can be broken down to the business process if the report has been defined accordingly. In HR, for example, they can be broken down to the employee.

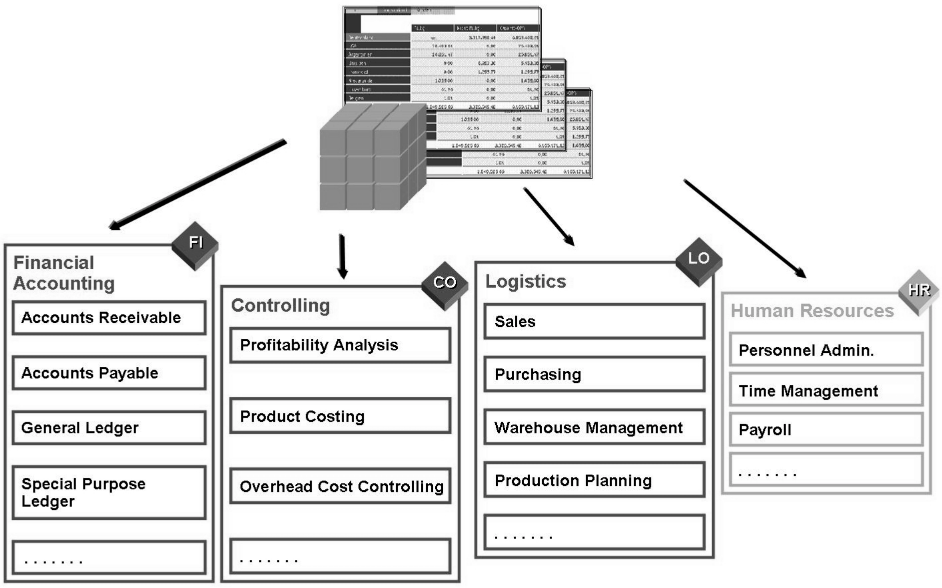


Figure 661: Business Content

The Business Information Warehouse includes Business Content, that is, business information from Accounting, Logistics, and Human Resources. This distinguishes it from, and is its great advantage over, other Data Warehouse products.

Business Content facilitates optimum customer support for the tasks performed by the user in question.

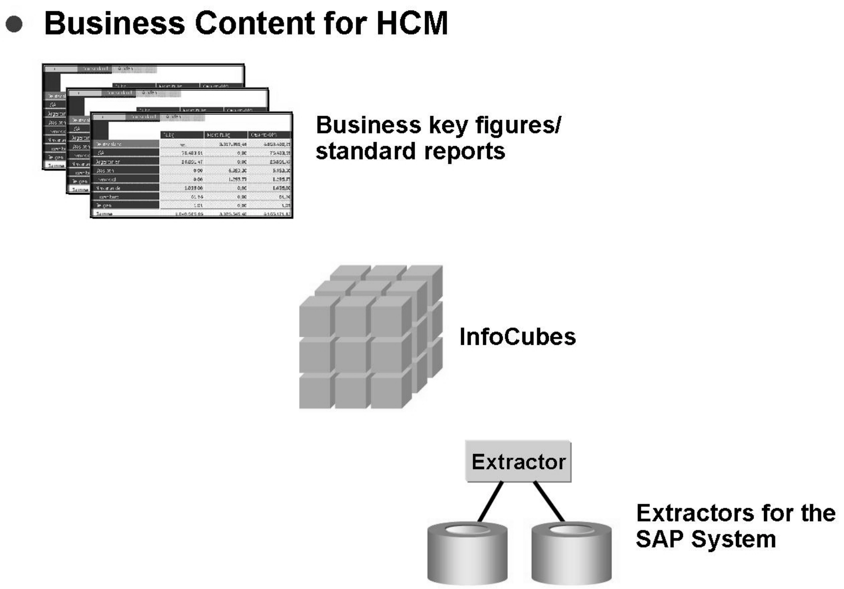


Figure 662: mySAP ERP HCM in Business Information Warehouse

Business Content makes it easier to report on, prepare, and retrieve data. Predefined standard reports and report templates enable you to create reports quickly and simply.

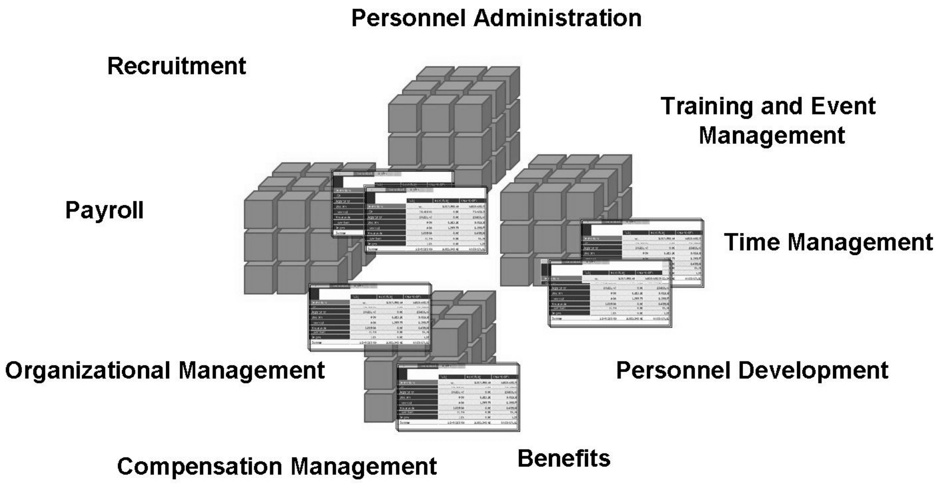


Figure 663: Business Content for HCM

The Business Content comprises extractors, InfoCubes, and queries (business key figures and reports) for the following human resources areas:

- Personnel Administration
- Recruitment
- Training and Event Managament
- Payroll
- Time Management
- Organizational Management
- Personnel Development
- Compensation Management
- Benefits

BW functions also enable you to create cross-application InfoCubes and queries / key figures, which are known as MultiProviders.

Examples of Key Figures and Reports (I)

- **Personnel Administration**

  For example: headcount, personnel structure, leaving rate, average age

- **Recruitment**

  For example: number of applications/applicants, advertising, advertising costs, recruitment success

- **Payroll**

  For example: salary costs per organizational unit, wage type comparisons, overview of salary costs

- **Training and Event Managament**

  For example: reports on attendance, cancellations, business event duration, fees, costs, revenue

- **Personnel Development**

  For example: qualifications per employee, proficiency of a qualification, employees by qualification group

- **Time Management**

  For example: overview of personnel times, leave, sickness, overtime, cost center debiting

- **Organizational Management**

  For example: overview of positions, occupied/vacant/unoccupied positions, full-time positions

- **Compensation Management**

  For example: compensation analyses, average annual salary, bonus payments, position of employees in pay grade/pay grade level, planned compensation adjustment

- **Benefits**

  For example: cost analysis according to organizational criteria, cost analysis according to benefits criteria

- **Learning Solution**

  For example, training by target group, test results, number of learning objectives achieved, external course price.

- **E-Recruiting**

  For example, application origin, candidate's qualifications, number of postings.

Business Content in HCM also includes standard calculations/structures for

- **Predefined time series comparisons**

	Number of EEs	Number of EEs	Number of EEs	Number of EEs
Organizational unit	2003	2004	Difference	Difference in %
Overall result for consulting dept	114	196	82	71,93 %

- **Calculation of averages**

	Number of EEs	Number of EEs	Number of EEs	Number of EEs	Number of EEs
Employee group	1. quarter 2004	2. quarter 2004	3. quarter 2004	4. quarter 2004	Average of 4 quarters
Active	535	535	535	542	536,75
Retired	1	1	1	1	1,00
Freelance	10	10	10	14	11,00
	546	546	546	557	548,75

Figure 664: Business Content: Structures

HCM Business Content includes predefined queries and key figures, and **structures** for frequently used standard calculations and comparisons.

This makes it easy for you to perform time series comparisons, and to calculate averages for specific periods.

These structures can be used for any HCM query.

Working with HCM Queries and Key Figures in BW

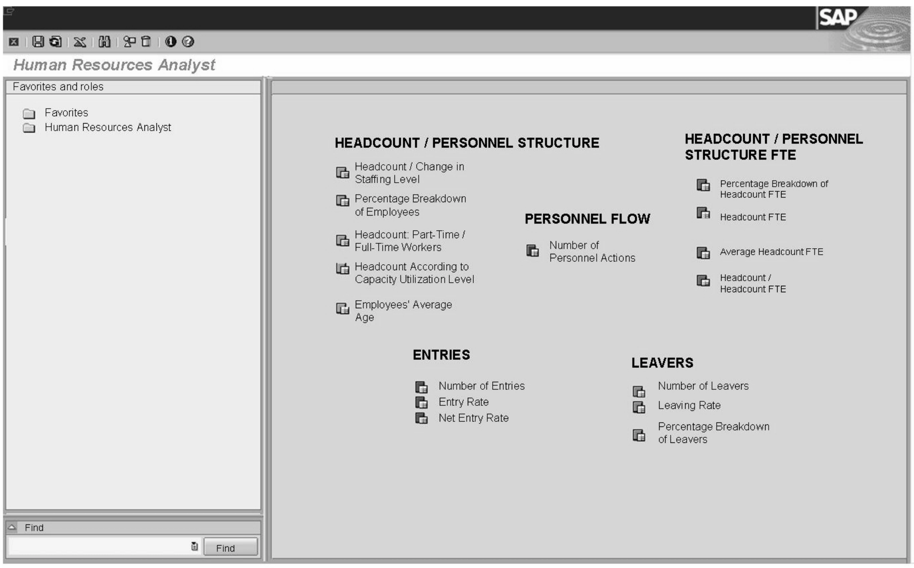


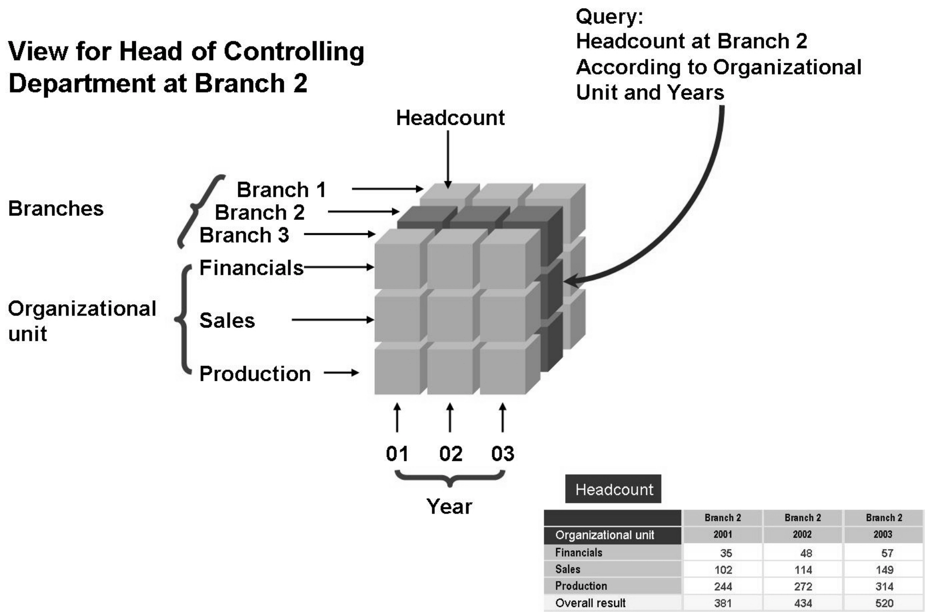
Figure 665: Business Explorer Browser

Communicating data to the people involved in a particular decision-making process is an important aspect of reporting within Human Resources, and of reporting in general.

The Business Information Warehouse enables you to retrieve reports and key figures using the Business Explorer Browser (that is, via the intranet/Internet). This accelerates data access, and ensures that all of the people involved in making a decision are supplied with identical information.

Roles can be created for the various user groups. Reports and key figures can be grouped together within these roles according to the tasks and issues concerned, and then accessed using the Business Explorer Browser.

Roles are also included in HCM Business Content, and contain HCM queries grouped into clusters.



	Branch 2	Branch 2	Branch 2
Organizational unit	2001	2002	2003
Financials	35	48	57
Sales	102	114	149
Production	244	272	314
Overall result	381	434	520

Figure 666: Query Views - An Example

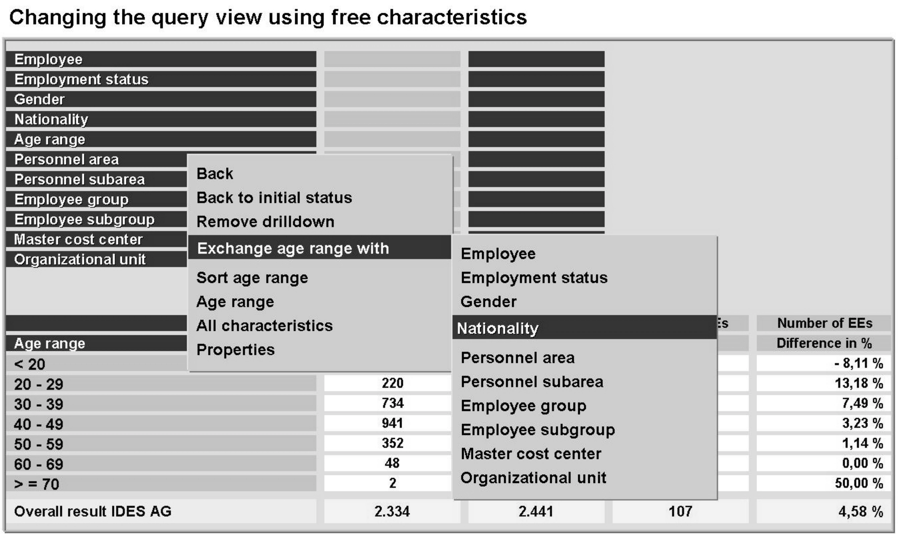


Figure 667: Navigation in a Query (Excel Front End)

The characteristics defined in a query as “free characteristics” can be used for navigation.

The Business Information Warehouse's multidimensional views mean that a single Human Resource query covers a variety of classic standard reports. HCM's “Headcount” query, for example, enables you to view the headcount in accordance with organizational characteristics, such as the organizational structure of the enterprise, employee groups, personnel areas, and cost centers. Alternatively, you can view the headcount in accordance with person-specific characteristics, such as gender, age, and nationality.

The query also enables you to view a combination of characteristics. Within an organizational unit, for example, you can view the headcount according to gender or nationalities. You can even “drill down” to data on an individual employee.

Practically all of the queries supplied by SAP for HCM provide the customer with this flexibility.

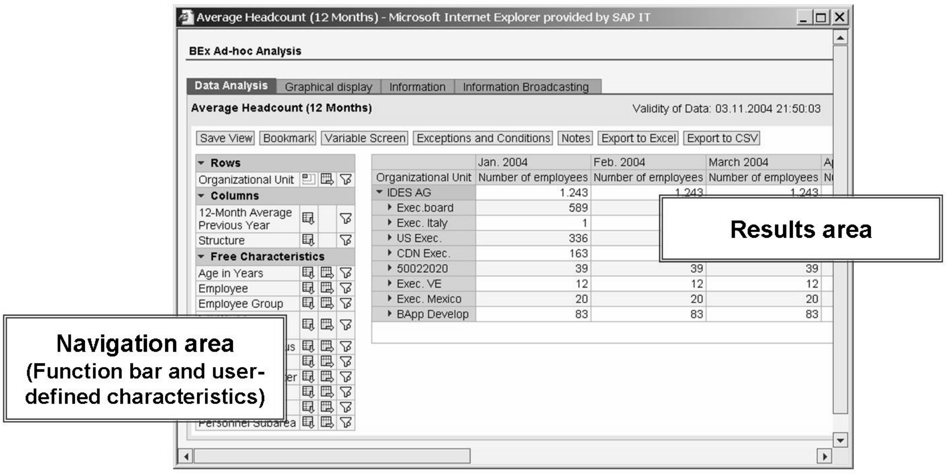


Figure 668: Navigation in a Query (Web Browser)

You can give users Web access to the BW queries as they are or as Web Cockpits (see next slide for details).

Figure 669: HR Web Cockpit: Example Headcount Planning

1165
Exercise 49: Overview of HCM in the Business Information Warehouse (BW)

Exercise Duration: 30 Minutes

Exercise Objectives

After completing this exercise, you will be able to:
- Navigate in existing BW queries

Business Example

You want to call BW Queries in the Web.

Task:

BW Exercises:

These BW queries take you beyond your role in the ERP system into the Web. (Please note any special instructions from your trainer.)

In the Web, the context menu is located either

• In the results area when you **right-click** a characteristic (possibly via the extended menu) or

• In the navigation area above the function bar that is located to the right of the characteristics

In the “Personnel Administration” area, start the query ***Average Age of Employees*** or Average Headcount (12 Months). Perform the following navigation steps:

1. Display the key figure according to the employee’s ***Employment Status*** as opposed to in the ***Organizational Hierarchy***. (Change characteristic)
2. Display the key figure according to the employee’s ***Nationality*** instead of according to the ***Employment Status***. (Change characteristic) How many employees are from Switzerland? What is the average age of these employees?

   Number of employees: ____________________________________

   Average age of Swiss employees:________________
3. Under ***Nationality***, enter a drilldown according to ***Gender***.
4. Choose *Back to initial status* in the context menu to return to the original status of the query.
5. Optional: Now you want to see active employees only; set the filter accordingly.

Solution 49: Overview of HCM in the Business Information Warehouse (BW)

Task:

BW Exercises:

These BW queries take you beyond your role in the ERP system into the Web. (Please note any special instructions from your trainer.)

In the Web, the context menu is located either

• In the results area when you **right-click** a characteristic (possibly via the extended menu) or

• In the navigation area above the function bar that is located to the right of the characteristics

In the "Personnel Administration" area, start the query ***Average Age of Employees*** or Average Headcount (12 Months). Perform the following navigation steps:

1. Display the key figure according to the employee's ***Employment Status*** as opposed to in the ***Organizational Hierarchy***. (Change characteristic)

   a) To start the query, double click on the query **Average Age of Employees.**

   b) In the context menu (possibly via the *Extended Menu*) on the Organizational Unit field, choose ***Switch Organizational Unit with ⇒ Employment status.*** The average age is displayed for each employment status.

2. Display the key figure according to the employee's ***Nationality*** instead of according to the ***Employment Status***. (Change characteristic) How many employees are from Switzerland? What is the average age of these employees?

   Number of employees: ____________________________________

   Average age of Swiss employees:________________

   a) In the context menu of the employment status field, choose ***Exchange employment status for → Nationality.*** The average age is displayed for all nationalities.

3. Under ***Nationality***, enter a drilldown according to ***Gender***.

   a) In the context menu of the nationality field, choose ***Add breakdown according to → Gender.***

   b) The average age for all nationalities is divided according to gender.

Continued on next page

4. Choose *Back to initial status* in the context menu to return to the original status of the query.

   a) In the context menu, choose ***Back to Start.***

5. Optional: Now you want to see active employees only; set the filter accordingly.

   a) In the navigation block for the *employment status* field, choose the filter icon.

   b) Select *3 active* and choose *Transfer*. Note that the output has changed.

Lesson Summary

You should now be able to:

- Give a general overview of the Business Information Warehouse in the area of HCM.
- Provide details of the business content of the InfoCubes, queries and key figures available in HCM.
- Execute HR queries.

Lesson: Overview of HCM in Strategic Enterprise Management (SEM)

1169

Lesson Duration: 30 Minutes

Lesson Overview

This lesson gives you an overview of the HR applications in SEM.

Lesson Objectives

After completing this lesson, you will be able to:

- Give an overview of HCM in Strategic Enterprise Management.

For more information, see the Instructor Guide in SAPNet.

Business Example

Once you have familiarized yourself with reporting in the ERP system and the BW System, you want to learn about SEM as a strategic enterprise management system.

Benchmarking with SEM

- Benchmarking is the process of comparing the same processes in different enterprises, plants, and industries to enable "best practices" to be determined and plans and activities be developed for improvements.

  (Score Research)

  ⇒ Learn from the best by comparing processes in different enterprises.

  ⇒ Comparing processes in different enterprises results in mutual learning.

Motivation: Changes in the current climate demand that enterprises improve their strategy orientation and align all business processes and managerial levels accordingly. This includes supplying HR departments and the management with all strategically important information. Afterall, only a correct assessment of risks and potentials ensures that the right decisions are met at an enterprise.

- Benchmarking - analyzing processes and indentifying room for improvement.
- Planning data and simulations from Personnel Cost Planning

In 1979, benchmarking was devised at enterprise level by the US copier manufacturers, Xerox, in an effort to combat competition from the Japanese market. The managing director of Xerox at the time, Charles Christ, sent a team of employees to Japan with the instruction to examine the procedures, products, and materials of their competition.

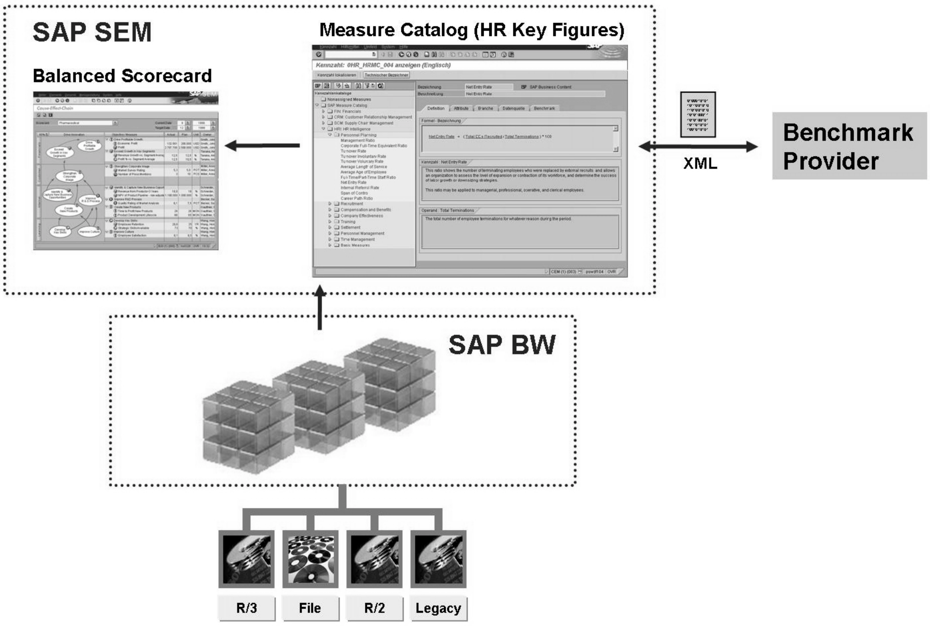


Figure 670: SAP SEM HCM Measure Catalog: Overview

Basic key figures

- Such as headcount, FTE (full-time equivalent), number of managers, hired employees, workdays, leavers.

Personnel Planning

- Such as management quota, fluctuation rate, average length of service, net entry rate, full-time/part-time rate.

Recruitment

- Such as net hiring rate, internal hiring rate, external hiring rate.

Compensation and Benefits

- Such as average employer expense for benefits, benefits for overall compensation, percentage enrollment in benefits.

Enterprises' effectiveness

- Such as costs per employee in FTE, salary revenue, income before interest and tax (EBIT) per FTE.

Training

- Such as training investment per FTE, training hours per FTE, training investment per training hour.

Personnel management

- Such as total costs for personnel activities, personnel area costs per employee, staffing factor personnel area.

Time Management

- Such as illness rate, illness value per FTE.

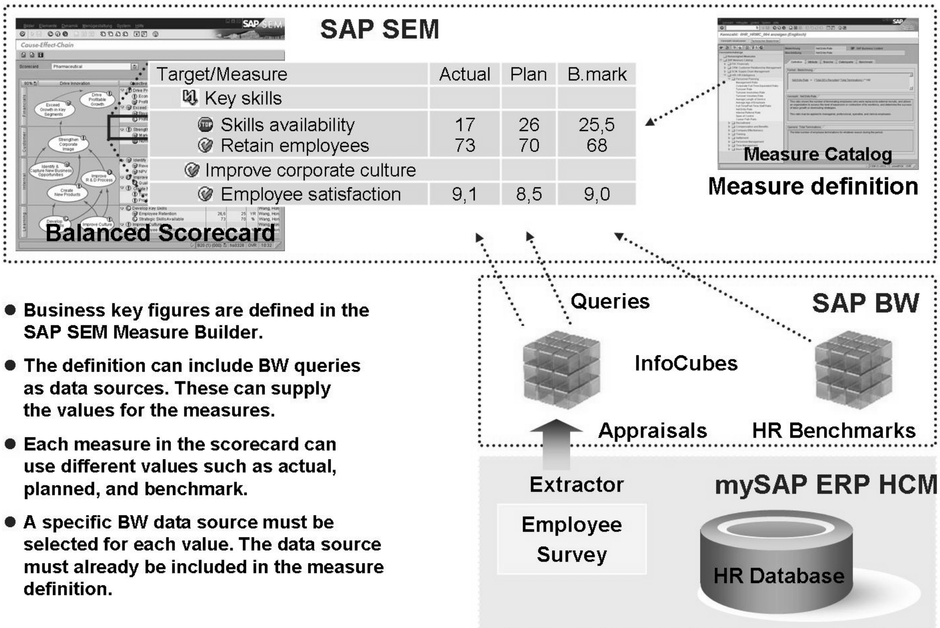


Figure 671: Data Flow _ Key Figure Employee Satisfaction

Possible data sources for key figures include:

- Basic key figures
- Calculated key figures
- Restricted key figures
- Structure

In order to be able to use them in a scorecard, the key figures must be provided by a ODBGO-enabled BW query.

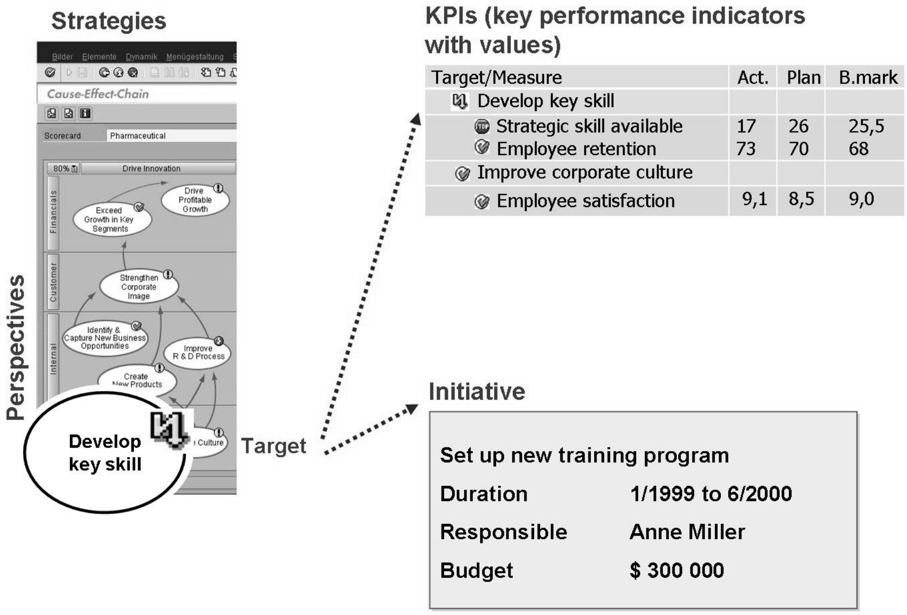


Figure 672: Balanced Scorecard (BSC) - Key Components

Why use the Balanced Scorecard?

- Examine enterprise startegy
- Derive and implement an HCM strategy
- Aligned with customer requirements
- Personnel area measures in interest of whole enterprise
- Measurable results
- Positive contribution of HR department to value-adding process becomes transparent
- Enhancement to HR department

Strategic goals are displayed in the **cause and effect chain** - one of the views in the Balanced Scorecard. Each objective belongs to a perspective and strategy. The relationships between different objectives are clarified using arrows.

Each objective is linked to initiatives and measures. The **initiatives** portray how an objective can be reached. The **measures** represent certain key performance indicators (KPIs) that allow you to check whether the target has been reached.

For each scorecard element (as show in the initiatives example), there is a person responsible, a specified duration, and, most probably, a budget.

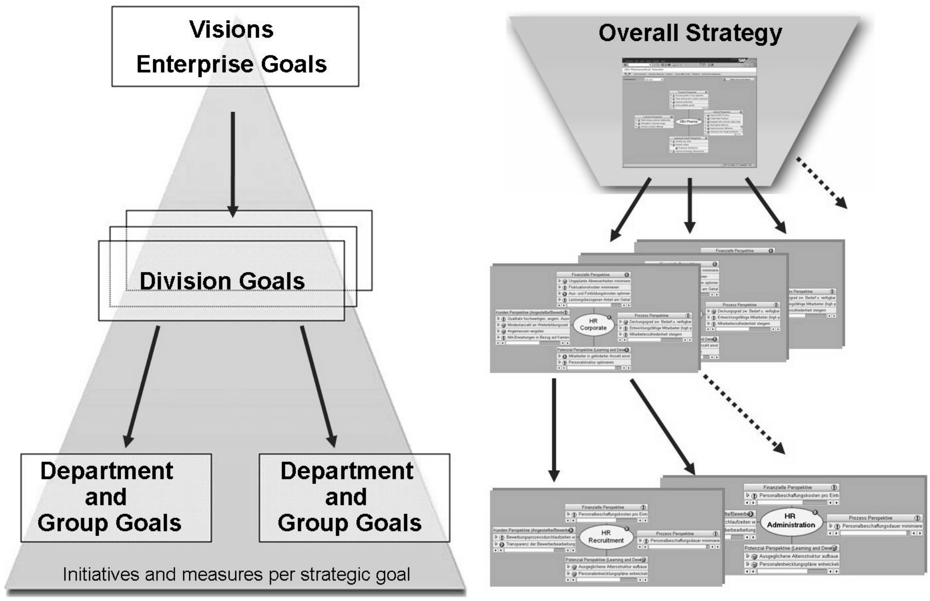


Figure 673: BSC: Strategic Alignment of the Enterprise

Enterprise goals can be cascaded throughout the entire enterprise and stored in lower-level scorecards for areas, departments, and so on. We can distinguish between the following levels:

- Define enterprise goals:
  - What are our core competencies?
  - What market position are we striving toward?
  - What products do we want to offer?
- Identify critical success factors:
  - Formulation of strategic goals
  - Grouping into strategies
- What Paths Lead to Success:
  - Formulate initiatives
  - Assign key figures
  - Set target values
  - Assign resources
  - Name people responsible

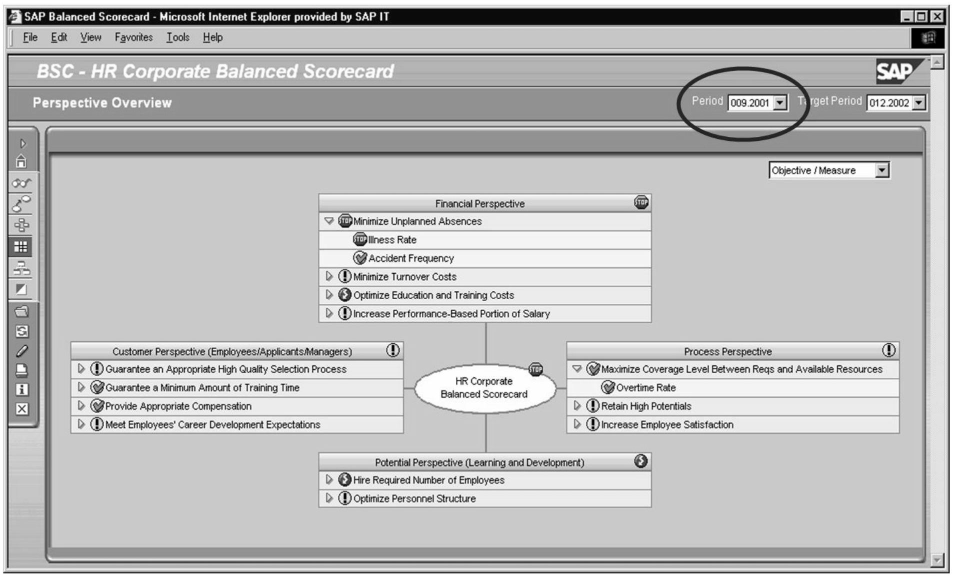


Figure 674: BSC: Perspectives

Implementing the Balanced Scorecard in SAP SEM:

- The classic definition of a scorecard covers four balanced perspectives on which the success of the enterprise depends.
- Strategtic goals are identified for each perspective that is important for the success of an enterprise or department. In this example, this relates to reducing umplanned absences or competitive compensation. Key performance indicators monitor to what degree the goals are achieved. The status of each goal is indicated using the colors red, yellow, and green.

The new aspect of the Balanced Scorecard concept allows not only financial goals to be considered as important factors of success, but also less tangible ones such as employee satisfaction and motivation.

The HCM department must consider the enterprise as its customer. As one of the HCM department's most important tasks is to assist others in contributing to the value-adding process, it is essential that the HCM department does not lose sight of its customers.

Once the customer perspective has been defined, the process perspective is much “simpler”. Processes should be so aligned that they provide optimal support for goals defined in relation to customers. The same applies to learning and growth perspectives that relate to the qualifications employees need in the HCM department to fulfill all customer requirements.

Possible goals could be: use the Balanced Scorecard to improve recruitment processes, minimize costs incurred by staff turnover, reduce absence times in personnel administration.

Facilitated Discussion

Discussion Questions

Use the following questions to engage the participants in the discussion. Feel free to use your own additional questions.

Lesson Summary

You should now be able to:

- Give an overview of HCM in Strategic Enterprise Management.

Unit Summary

You should now be able to:

- Give a general overview of the Business Information Warehouse in the area of HCM.
- Provide details of the business content of the InfoCubes, queries and key figures available in HCM.
- Execute HR queries.
- Give an overview of HCM in Strategic Enterprise Management.

Course Summary

You should now be able to:

- Explain the basic processes in Human Resources
- Configure HR Master Data and Personnel Administration to meet customer requirements
- Configure Time Management data to meet customer requirements
- Implement various procedures for reporting on HCM data

Appendix 1

New as of ECC 6.0

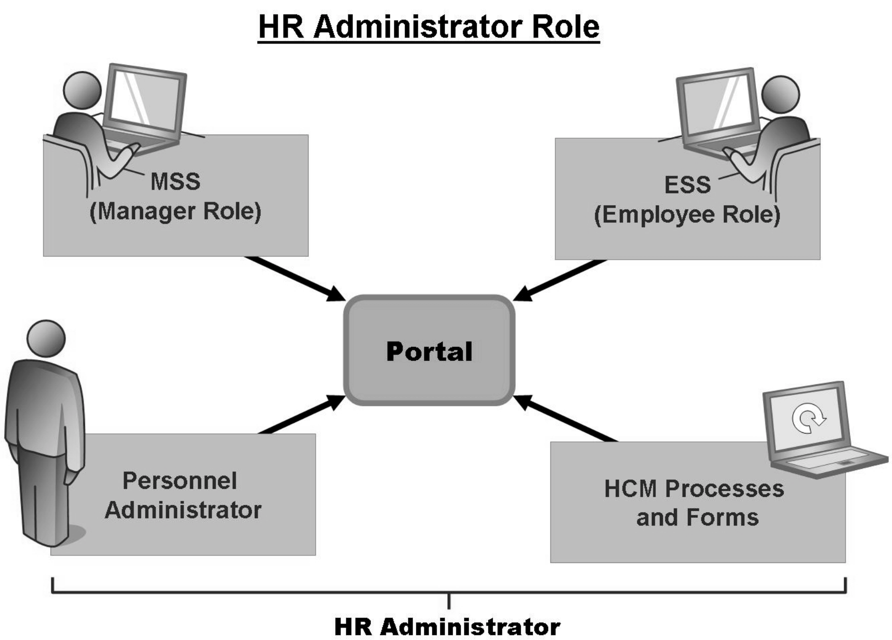


Figure 675: HR Administrator Role

The HR Administrator is a new role in the portal that offers an administrator various options, depending on authorization. These options include:

- Maintaining employee data
- Editing processes that were triggered via workflows (attachments are also possible, if required)
- Various evaluations

Employee Interaction Center (EIC)

EIC in Human Resources – a call center and help desk for employees, offering the following options:

- Employee search and identification
- Knowledge search
- Integration of HR applications
- Creation and processing of activities
- Workflow automation
- Agent inbox

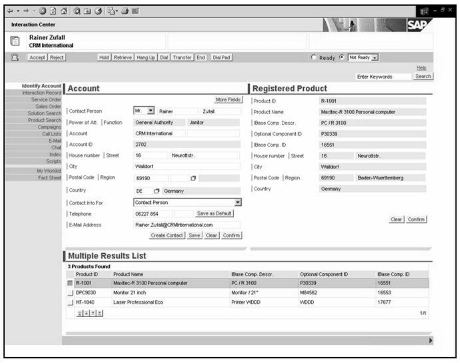


Figure 676: Employee Interaction Center (EIC)

As of ECC 6.0, Human Resources includes the Employee Interaction Center (EIC), which functions as a call center and a help desk for employees.

If employees have any problems, questions or changes to report in the area of human resources, they can contact the EIC by e-mail or by telephone.

The employees can also contact the EIC directly via an ESS application.

The EIC employees (EIC agents) have access to a tool for finding employees. The EIC agents can use authorization questions to uniquely identify an employee when he or she contacts the EIC by telephone, for example.

The EIC agents can search through a connected knowledge database for information and documents.

EIC agents can maintain HR data about the employees. To make this possible, applications for HR administrators or self-service applications are linked to the EIC.

EIC agents can create and process operations for the documentation concerning employee queries. In this way, they can control the treatment of the inbound queries.

EIC agents can create follow-up activities and transfer operations to other employees.

The agent inbox provides EIC agents with a worklist of all the queries and operations that need to be dealt with.

There is a new section in the Personnel Management implementation guide (IMG) on setting up the EIC.

Employee Interaction Center (EIC) Requirements

- Reduce HR costs
- Maintain or improve service quality
- Use resources in HR more efficiently
- Create service transparency in HR
- Optimize accessibility
- Make responsibilities more transparent
- Increase the efficiency of communication contacts
- Guarantee consistency in HR service requests

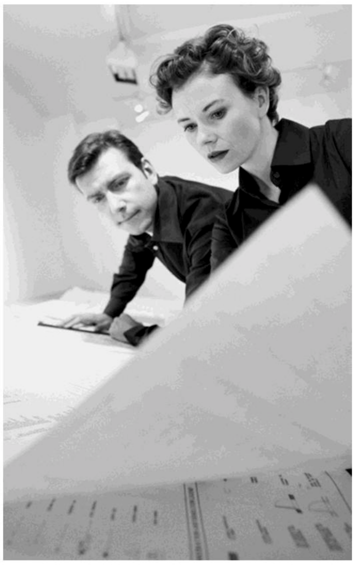


Figure 677: EIC Requirements

The Employee Interaction Center allows you to harmonize the above mentioned requirements with your actual business processes.

The goal of this is to minimize the effort involved by standardizing and automating processes and their central processing without any subsequent loss of quality.

The following advantages are gained from introducing the EIC:

- Improved service quality

  Fast and service-oriented resolution of employee queries supported by solution databases, contact history, and so on.

  Single point of contact for various channels of communication such as telephone, e-mail, workflows, incoming ESS/MSS, fax, and post
- Reduction in costs for HR services
- Increased efficiency and cost transparency

  Support for integrated and standardized HR processes, including the agreement from Service Level Agreements

  Bundling and more efficient use of HR resources

  Automation of the processes

  Integration of Employee Self-Service and Manager Self-Service using the SAP Enterprise Portal

  The easy-to-use, interactive interface plays a role in achieving goals quickly.

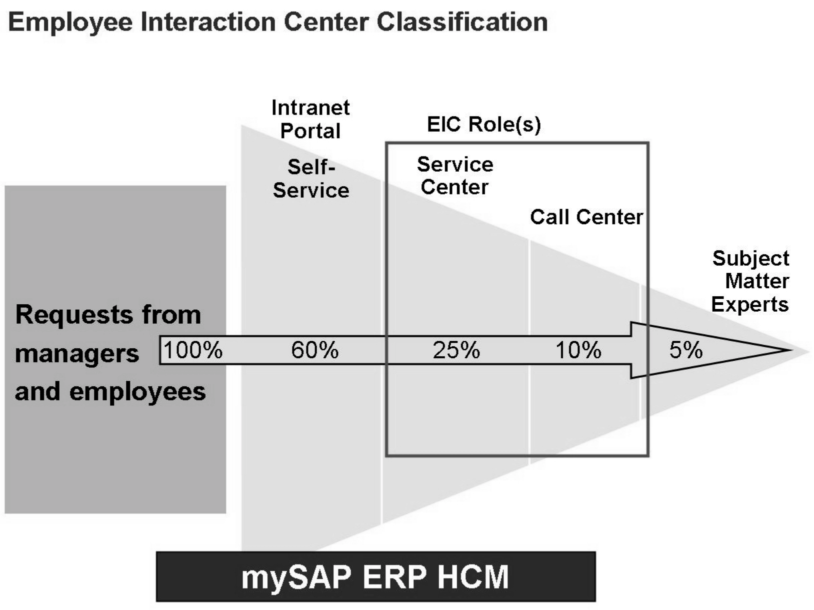


Figure 678: Employee Interaction Center Classification

Before integrating an EIC, it is a good idea to cover as many tasks as possible with self-service. This includes operations such as leave requests or changes to employee master data.

If this is not possible, perhaps because the employee has further queries, or an activity has to be revised again (for example, travel request), the EIC is used. This would be the case, for example, for operations such as an organizational reassignment or an overseas assignment. In the EIC, the service center provides first level support that can deal with most of the tasks that arise.

The EIC can continue to process the activity whilst physically separate from the trigger.

Complicated special tasks are forwarded to the advice center (second level support).

Only if the task cannot be dealt with in the EIC do subject matter experts (that is, HR strategists in the last instance) intervene.

What is Duet?

- The first joint product from SAP and Microsoft
- Uses selected mySAP ERP 2004 business processes on an MS Office 2003 front end
- Enhances the SAP interface options to include an additional user interface

Important for Enterprise IT Strategy

- Pushing business information and processes to all users
- Instant and intuitive access to SAP applications
- Enhancing Microsoft Office to include SAP data and processes

Figure 679: Duet: Overview

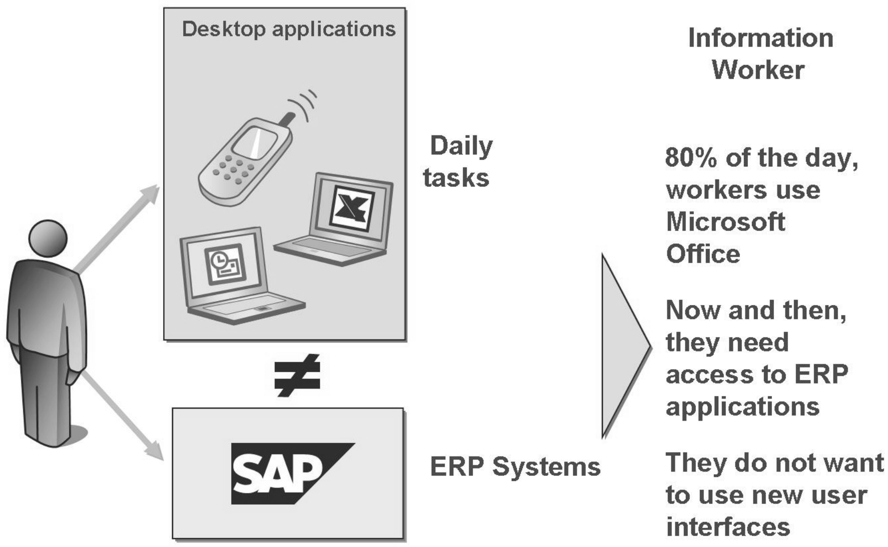


Figure 680: Duet: Different User Interfaces

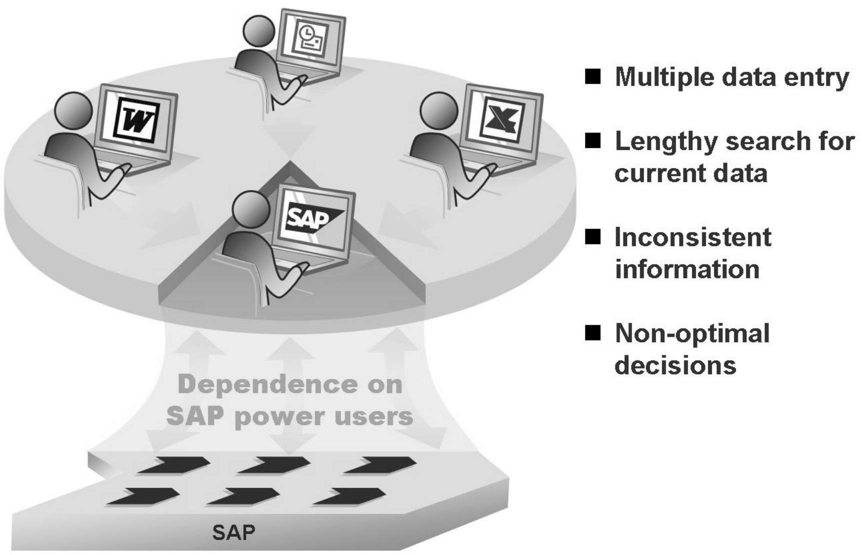


Figure 681: Duet: Loss of Data and Process Quality

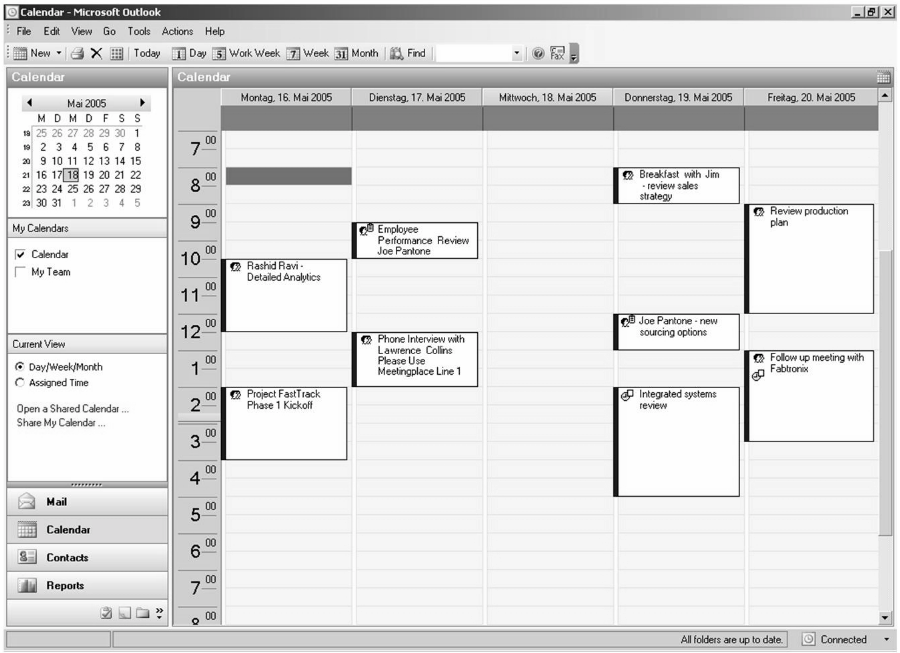


Figure 682: Duet: Demo

Scenarios - Overview

- **Time Recording**
  Time recording in SAP systems can be done directly from the MS Outlook calendar
- **Leave Request**
  Create leave requests from MS Outlook calendar directly
- **Budget Monitoring**
  Receive reports in MS Outlook, set/change threshold values for alerts, transfer budgets between cost centers
- **Team Management**
  Information about employees in the MS Outlook address book

Figure 683: Duet: Version 1.0

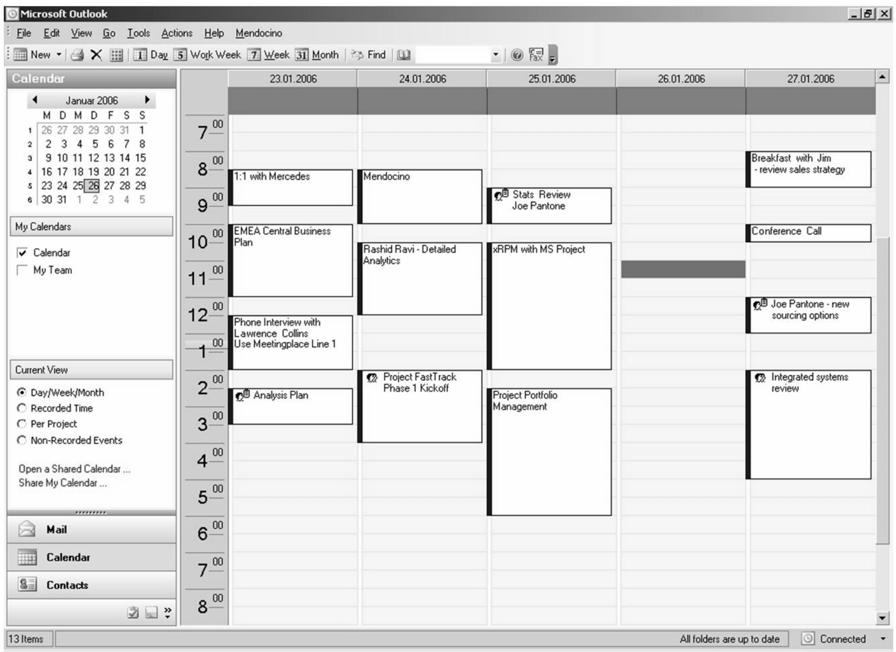


Figure 684: Duet: Time Recording (1)

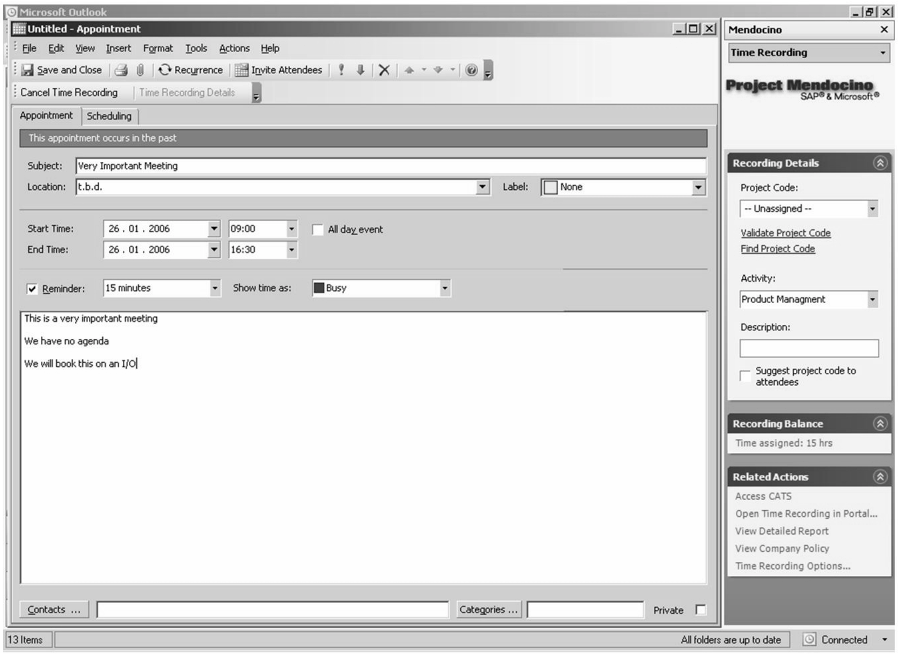


Figure 685: Duet: Time Recording (2)

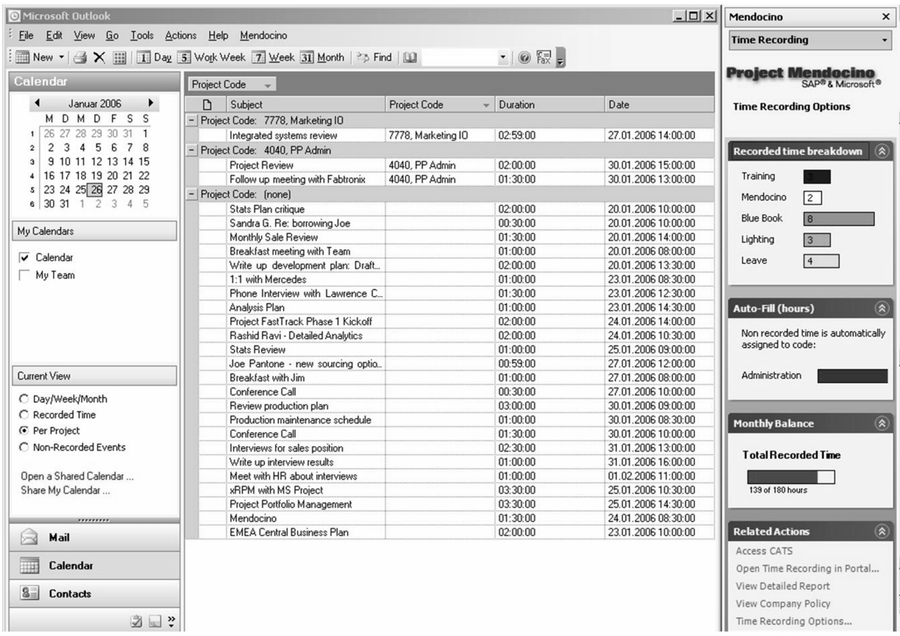


Figure 686: Duet: Time Recording (3)

Appendix 2

Additional Information Material: Optional for USA and Canada Only

- This section contains supplementary material for reference purposes.
- This material is not part of the standard course.
- Consequently, the instructor might not cover this during the course presentation.

Content:

- mySAP Human Resources Concurrent Employment

Objectives:

- Define Concurrent Employment
- Describe benefit implications such as seniority calculations for concurrent employment
- View work schedules for concurrent assignments
- Discuss payroll processing considerations such as Overtime and Garnishment
- Determine payroll posting options
- Name new logical database required for concurrent employment

Business Scenario:

- A company has multiple facilities in the same city. Employees can hold positions concurrently in these facilities. Service should be combined and payroll considerations such as overtime calculations need to be available. Data entry clerks want to easily see all personnel assignments.

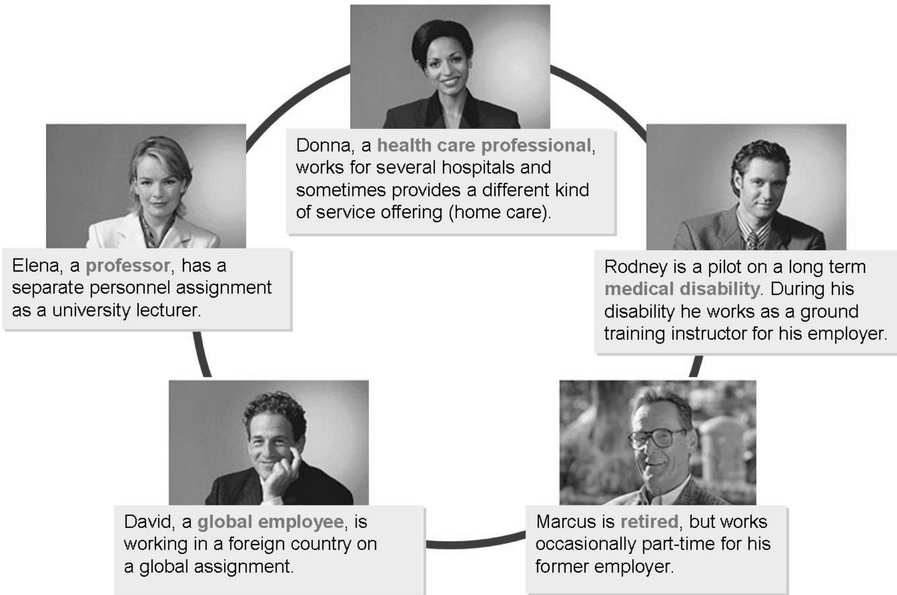


Figure 687: Examples of Concurrent Employment Situations

Concurrent employments allow one employee to hold multiple positions simultaneously and link those positions together through sync points for employment consideration such as time, payroll and benefit processing.

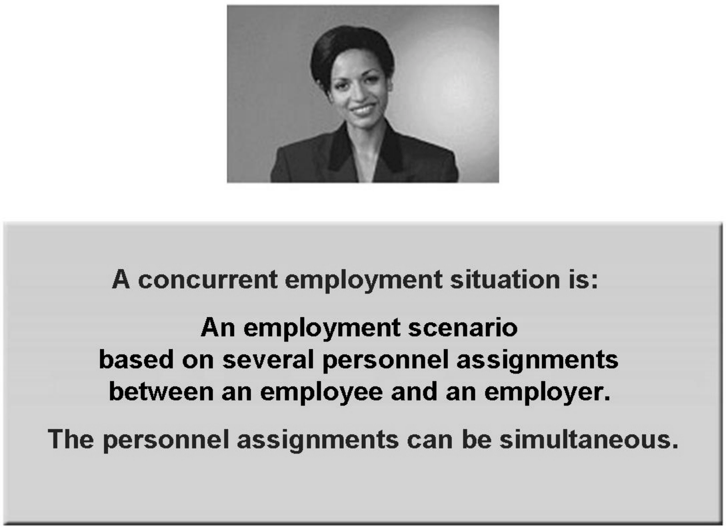


Figure 688: Concurrent Employment Definition

To accomplish this, new additions such as infotypes, header structures, time and payroll schemas, and a benefit workbench have been added to the Enterprise release to accommodate employment tracking and processing.

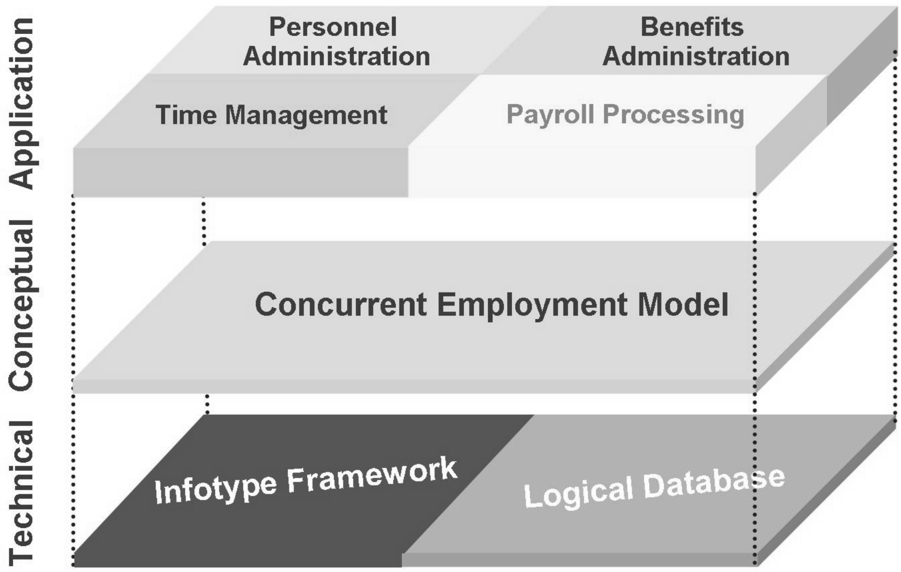


Figure 689: Concurrent Employment Solution at a Glance

The Infotype Framework allows you to have the user interface separated from the business logic, so that it becomes easier to build new transactions at infotype level, for example, similar to the transaction PA30, without having to deal with the dynpro logic. It supports the creation of new web applications, for example. The principle of data sharing is supported, thanks to the new infotype framework.

A new logical database (PNPCE) enables reporting based on the person or on the personnel assignment.

The concurrent employment model is a conceptual solution for CE using the available tools on HCM.

For the R/3 Enterprise release, the components Personnel Administration, Benefits, Time Management & Evaluation, and Payroll have been enhanced to support concurrent employment capabilities. This components have been localized for the US and Canada only.

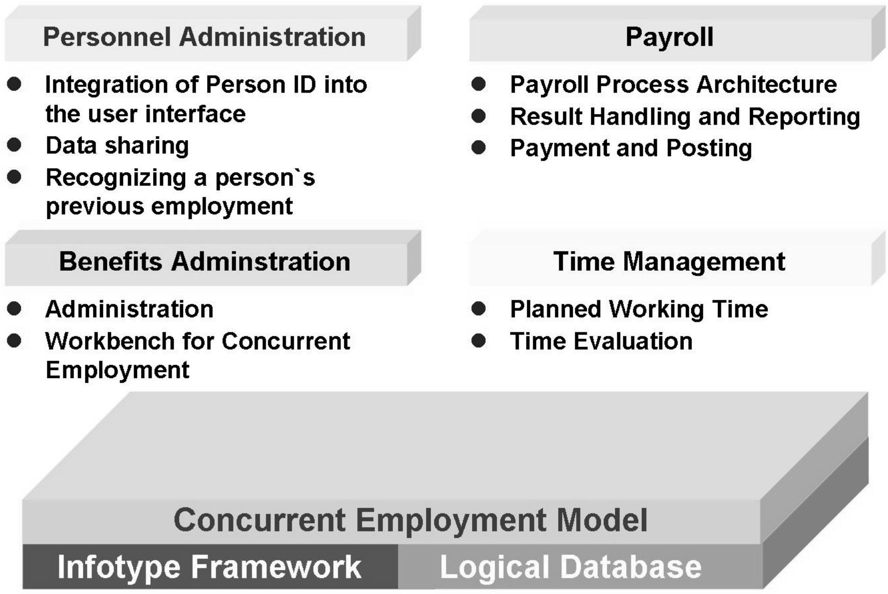


Figure 690: Concurrent Employment Solution at a Glance

Some highlights for each of the components. For example, for Personnel Administration the Person ID concept has been realized. Decisions are made during configuration as to which infotypes should be shared during additional assignment processing. New prompts have been added to alert data input clerks of a second assignment.

Under Benefits there is a new workbench to combine service from multiple positions for benefit eligibility. Time and Payroll schemas have been enhanced to sync up positions for processing and calculations such as overtime limits.

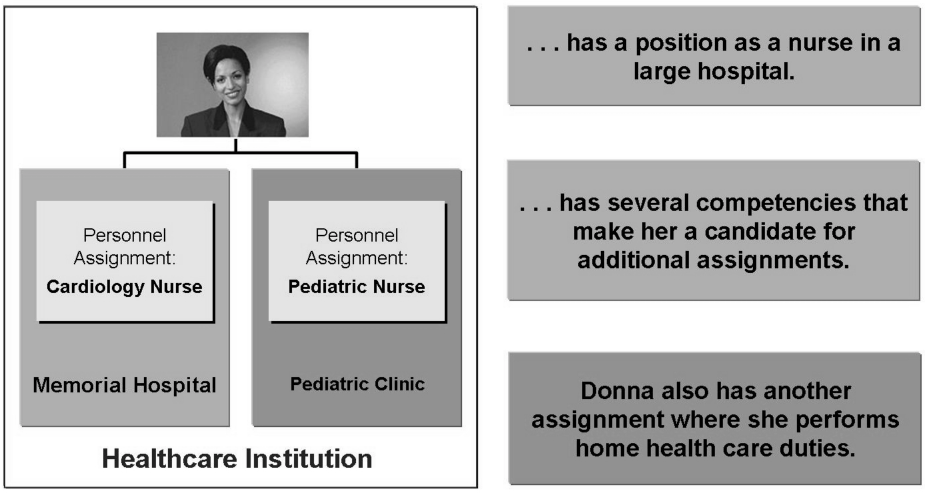


Figure 691: Donna, for example …

A example of an employment situation that requires concurrent employment capabilities.

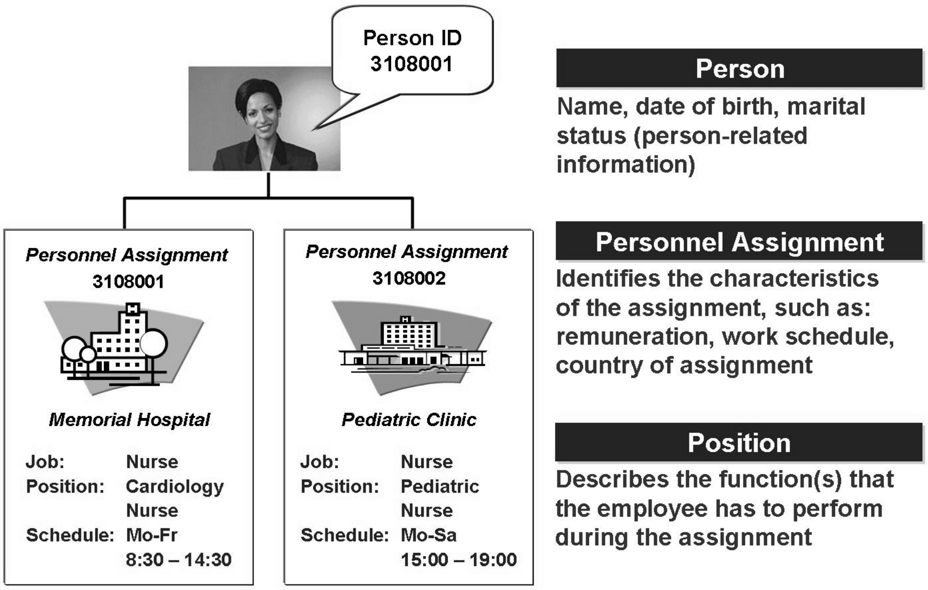


Figure 692: Concurrent Employment Model

Here we see three key parts of the concurrent employment model. The first is the person. The different personnel assignments are linked by the Person ID. Information about the person such as name, date of birth, address, and so on should be shared between the positions so that no duplicate data entry is required.

The Personnel Assignment identifies the characteristics of the assignments such as remuneration, work schedule, and country assignment.

The Position describes the function that the employee will perform during the assignment.

Handling Multiple Assignments

- The Person ID is used to track the individual within the entire enterprise for the life time of the employee.
- All previous employments of a person are automatically recognized.
- If all previous personnel assignments are currently inactive, this person is a rehire.
- Security is in place to guarantee that multiple users access information about the person according to their authorization level only.

In “Customizing”, it is defined which Infotypes and Subtypes should have “data sharing” of Person, Personnel Assignment and Employer.

If a person is identified as already holding a personnel assignment, the system links the new personnel assignment to the person and data sharing is established.

This enables the end user to maintain data that remains the same for one or more personnel assignments.

New Ways of Viewing and Accessing Person Information

- New features enable you to easily navigate from one personnel assignment to another of the same person.
- A new overview option enables you to have a list of all personnel assignments of a person.
- A summarization screen allows you to have in one screen an overview of all active personnel assignments of a person.

Once the appropriate configuration is made, you can easily see the personnel assignments on transactions such as PA20, PA30, and PA61.

Grouping of Personnel Assignments

- Personnel assignments can be grouped together for time and payroll processing as well as for reporting purposes.
- For example, a person can join a certain benefit plan if by combining his/her personnel assignments heor she meets the enrollment requirements.
- mySAP ERP 2005 comes with predefined rules to build groups of personnel assignments for common processing, but users can build their own rules.

There are valid reasons to group an employee's personnel assignments. Based on company policies and government regulations, there may be times when you want to add together hours from the concurrent assignments. Conversely, there may be times when this is not necessary. This decision is made in the grouping rules created during configuration. The grouping rules can vary. For instance, you can group for benefits differently than for time calculations.

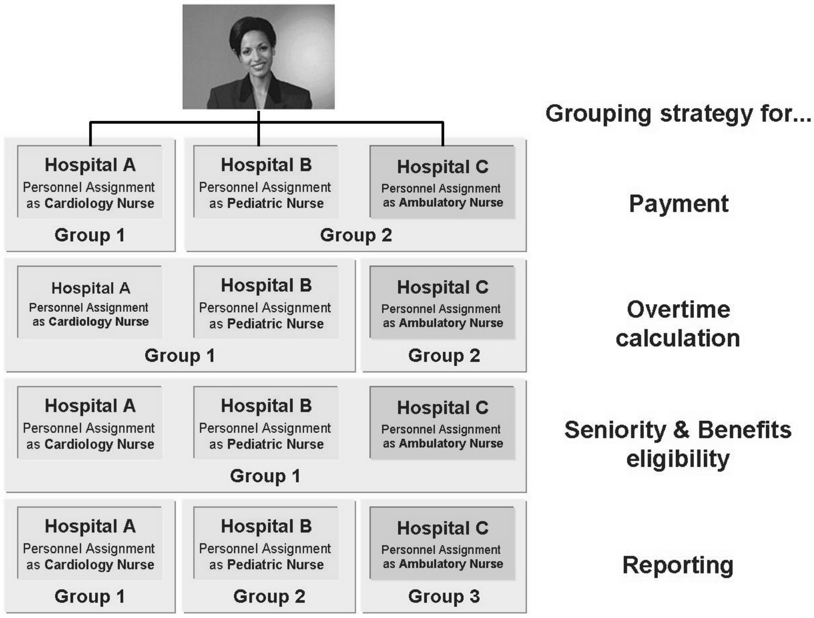


Figure 693: Grouping Examples

It is common practice and often company policy to group personnel assignments for different processes, such as payment, overtime calculation, benefits administration, and so on.

To group personnel assignments based on various criteria, you can use the *Grouping Editor*.

The examples shown in the graphic already indicate that the grouping of personnel assignments may differ from application to application or even within a certain topic so that the *Grouping Editor* needs to reflect different grouping scenarios for each application. It is customizable and relies on organizational data during the grouping process.

- **Business scenarios for grouping correspond to grouping reasons**
- **SAP delivers a set of grouping reasons**
- **You should not need to change grouping reasons**
- **You can define additional grouping reasons**

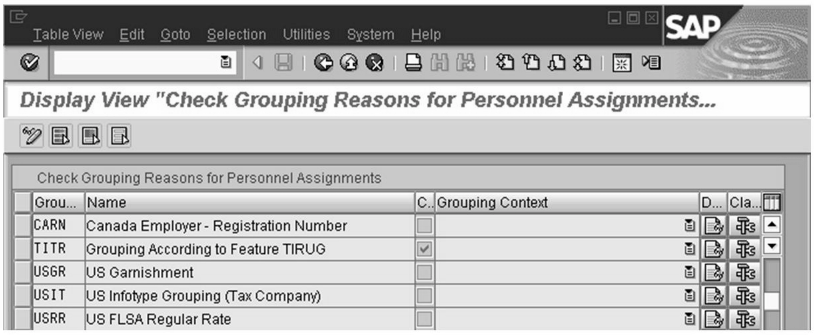


Figure 694: Grouping Reason

Typical grouping reasons are:

- All assignments of a person should be grouped together, for example, for storing the person ID.
- All assignments with the same country grouping should be grouped together, for example, for storing resident tax area data.
- All assignments with the same employer should be grouped together, for example, for tax reasons or for garnishments.

The settings are maintained in the "Grouping Reasons for Personnel Assignments" table (T7CCE_GPREASON) in the IMG: *Personnel Management → Personnel Administration → Basic Settings → Basic Settings for Concurrent Employment → Editor for Personnel Assignment Groupings → Change Grouping Reasons for Personnel Assignments*

Grouping contexts are used by some transactions in order to provide additional data to the grouping rules. That is, to provide some "context". If the transaction does not provide the context, the rule will not be able to evaluate it even if it is maintained in this table. This is the reason why you should not change the assigned grouping contexts for the standard reasons.

It is expected that no changes to this table are required.

The "Changeability of Grouping Reason Assignment" indicator controls whether the assignment of grouping rules may be changed.

- **A grouping rule is a technical description of how to derive grouping values.**
- **It is linked to an ABAP Objects class which provides the implementation.**

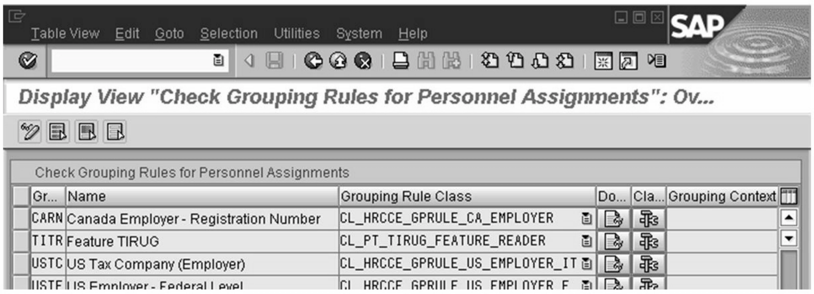


Figure 695: Grouping Rules

The settings are maintained in the "Grouping Rules for Personnel Assignments" table (T7CCE_GPRULE) in the IMG: *Personnel Management → Personnel Administration → Basic Settings → Basic Settings for Concurrent Employment → Editor for Personnel Assignment Groupings → Change Grouping Rules for Personnel Assignments*

- **Tables T7CCE_GPASG / T7CCE_GPASGM assign grouping rules to grouping reasons**

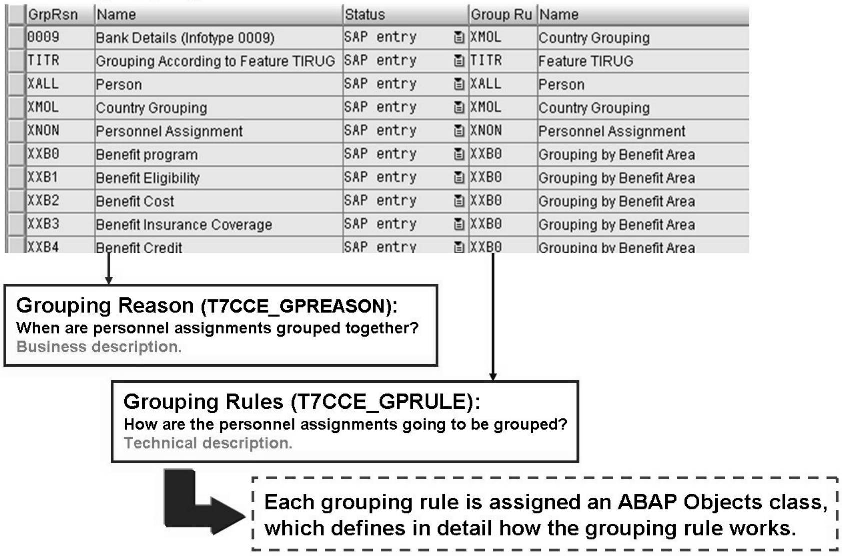


Figure 696: Linking Grouping Reason to Grouping Rule

The “Assignment of Grouping Rule to Grouping Reasons” tables (T7CCE_GPASG and T7CCE_GPASGM) are evaluated to determine a Grouping Rule for a given Grouping Reason.

- Table T7CCE_GPASG contains country-specific entries. One of the key fields is MOLGA.
- Table T7CCE_GPASGM contains international entries.
- Both tables have the key field Status to distinguish SAP entries from customer entries.
-

> **Hint:** Note: Any customer entry in this table will always be evaluated before the SAP entry. Country-specific entries have higher priority than international entries. Therefore, the evaluation order is:

  - Country-specific customer entry
  - International customer entry
  - Country-specific SAP entry
  - International SAP entry

The settings are maintained in the IMG at: *Personnel Management → Personnel Administration → Basic Settings → Basic Settings for Concurrent Employment → Editor for Personnel Assignment Groupings → Change Assignment of Grouping Rules to Grouping Reasons*

- **Infotype 0712 enables you to define a main personnel assignment that is required in certain applications.**
- **The subtype determines the grouping reason.**
- **There is a main personnel assignment for each group.**

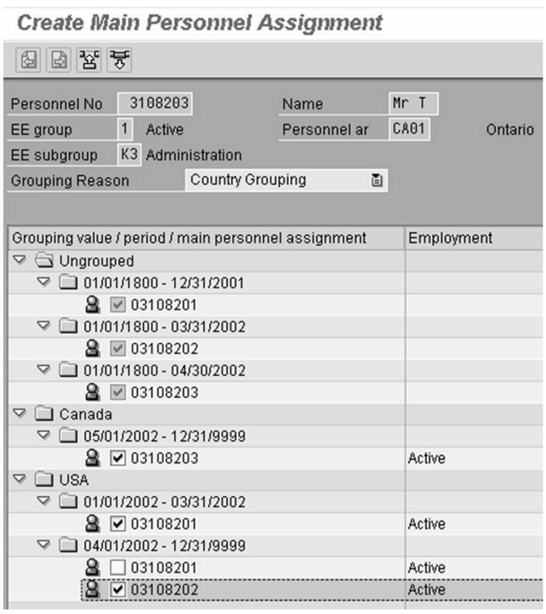


Figure 697: Main Personnel Assignment

Typical applications for the main personnel assignment are:

- To indicate which assignment of a benefits area holds the benefits information
- To indicate which assignment of a tax company group holds the main tax information

Some applications determine a main personnel assignment automatically if there is no IT712 specified

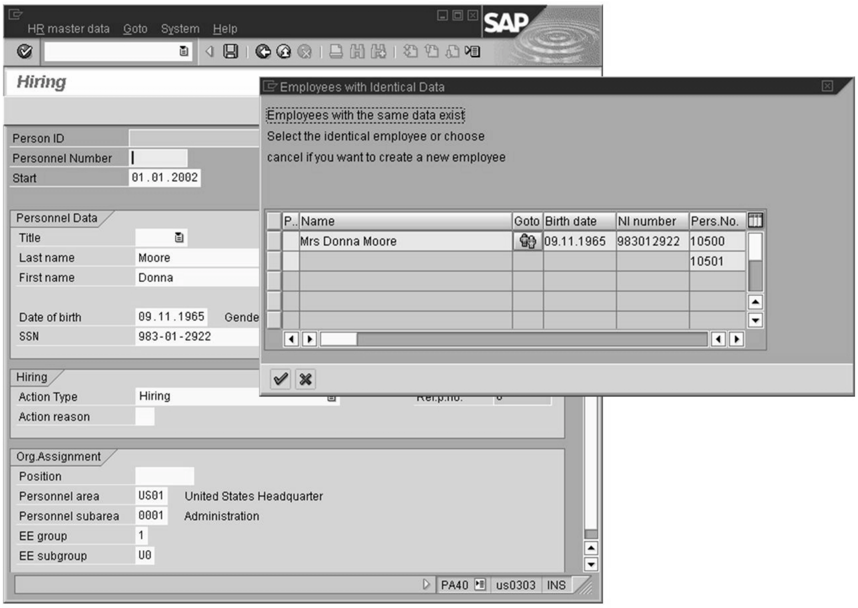


Figure 698: Recognizing Previous Employment

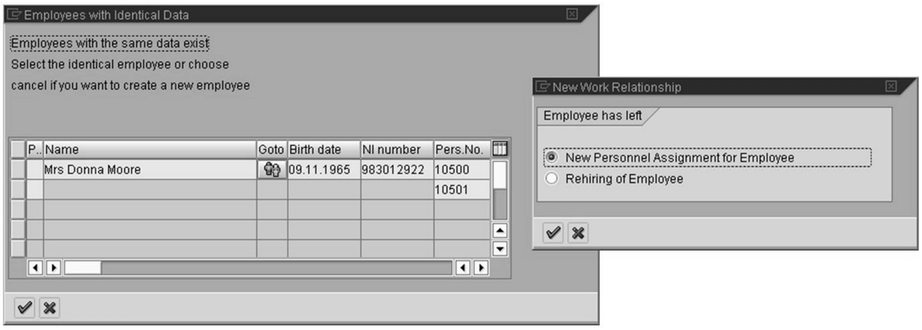
During the Hiring personnel action, the system tries to find out if there are previous and currently active employments for the same person.

By looking at the Social Security Number (USA) (field name PERID), last name, first name, and date of birth of the person, the system is able to recognize previous employment records of that person.

This means that the system will present all records matching your initial entries.

The user may confirm whether the person is the same or not:

- If the person is not the same person, then the action will proceed as in the non concurrent employment case.
- If the user confirms the entries as belonging to the same person, the system will continue with additional processing for concurrent employment (see next page).



- **The user selects an assignment of the person.**
- **If the selected assignment is active, the system always creates a new assignment.**
- **If the selected assignment has been terminated, you can either**
  - **Create a new assignment or**
  - **Create a rehire**

Figure 699: Rehire or New Assignment

In the “Employees with Identical Data” dialog box, the user needs to select an assignment from the list or cancel if he or she wants to hire a new employee.

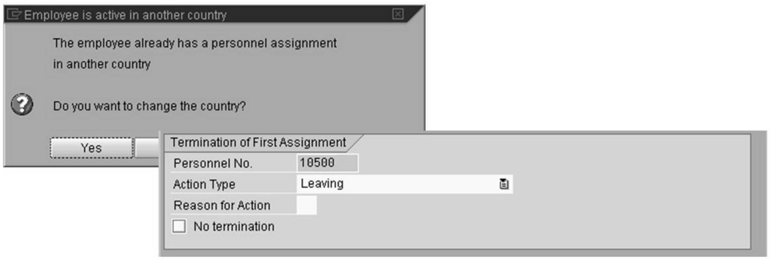
Since a person may have several assignments that might be terminated and active at the same time, it is important to know what kind of personnel action the user wants to perform:

- To create a new assignment for the person
- To rehire the person

If the user wants to create a new assignment for a person, he or she can select any assignment from the list. However, by choosing an active assignment, the “New Work Relationship” dialog box will not appear.

After you enter the appropriate entries, the system will continue with the desired personnel action (new assignment or rehire). Which infogroup will be presented for each personnel actions depends on the settings made in Customizing.

The personnel actions, “new assignment” and “rehire”, are stored with the logical keys ADDITIONAL_ASSIGNMENT and REHIRE.



- **If the system detects that the new assignment is in a different country, it asks the user if he or she wants to perform a "Country Change" personnel action.**
- **If the user runs a "Country Change" personnel action, the system offers to terminate the previous assignment.**

Figure 700: Country Change

The logical keys for the "Country Change" and the "Termination" personnel actions are HIRE_COUNTRYCHANGE and TERMINATION.

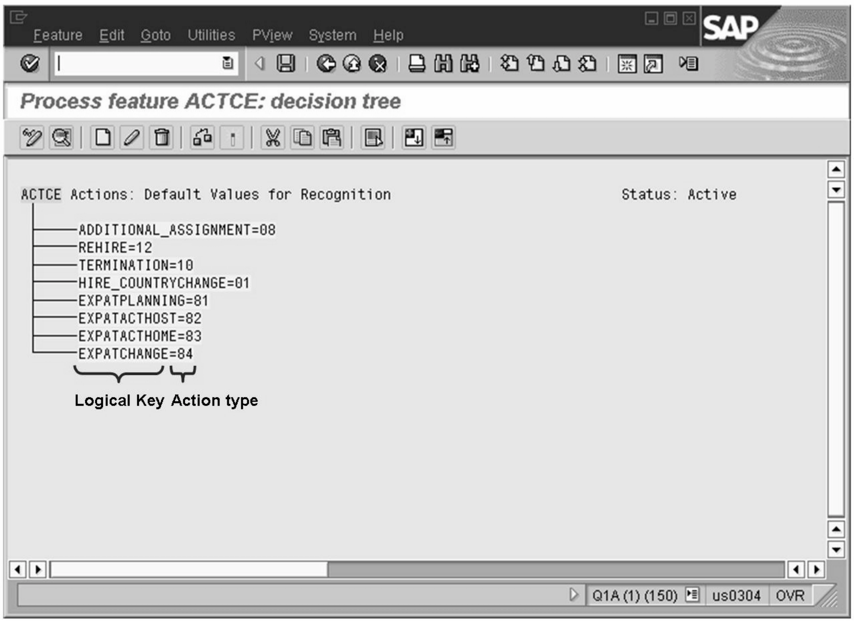


Figure 701: Customization Steps

With the help of the "Actions – Default Values for Recognition" feature (ACTCE), you determine how the system should react during hiring actions for employees for whom a personnel assignment already exists.

Customization for the “Actions – Default Values for Recognition” feature (ACTCE) is maintained in the IMG: *Personnel Management → Personnel Administration → Customizing Procedures → Settings for Concurrent Employment → Actions for Concurrent Employment*

The logical keys are predefined. The first 4 logical keys (ADDITIONAL_ASSIGNMENT, REHIRE, TERMINATION, HIRE_COUNTRYCHANGE) have already been explained here.

The other logical keys correspond to the Management of Global Employees solution, which is handled in a separate workshop.

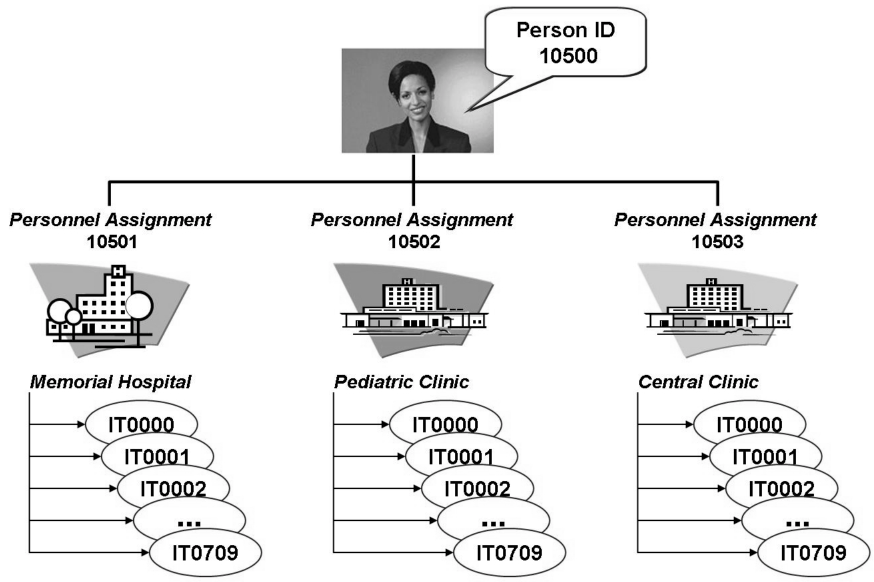


Figure 702: Data Sharing Principle

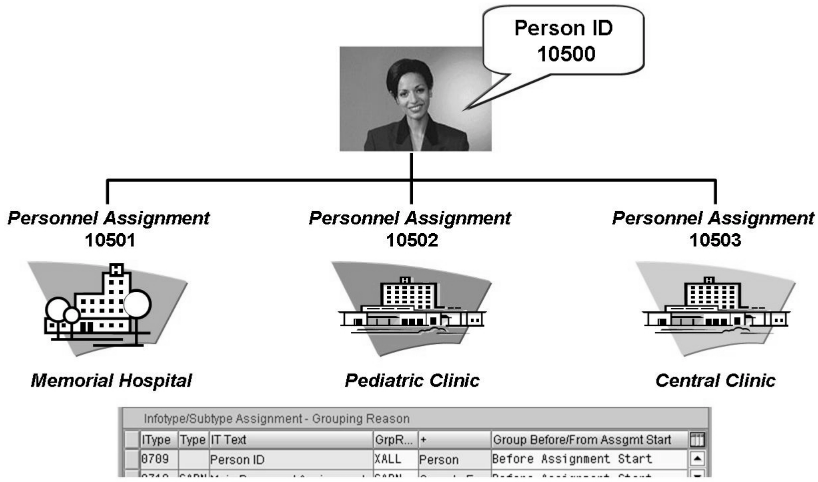
When you create a new personnel assignment for a person, data stored in a previous personnel assignment may be required for the new one.

To simplify data maintenance across all personnel assignments for end users, the system uses the data sharing mechanism.

Data is stored in infotypes, which always contain information specific to one assignment. If data needs to be specific for a group of assignments, the data sharing mechanism is applied.

There are different ways to share data:

- Among active personnel assignments only (see the Person ID example)
- Among all personnel assignments in one company (see the Tax Data example)



- **Since the person ID is the same for all assignments, the corresponding *Person ID* infotype (0709) is shared across all assignments.**

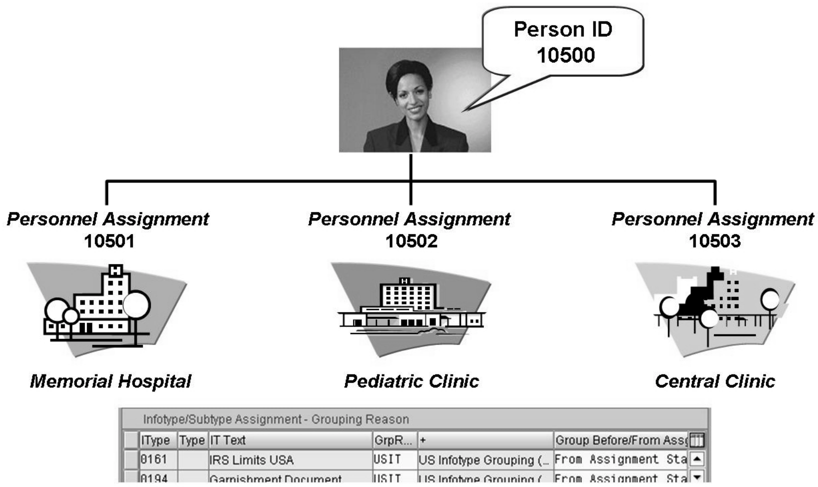
Figure 703: Data Sharing: Person ID Example

In this example, the records of the Person ID infotype (0709) should be same for all assignments. Technically, we want to group all assignments of the same person and then share the data in the infotype 0709 within the group.

Grouping all assignments together is achieved using the grouping reason “XALL”.

Customization is maintained for “Infotype / Subtype Assignment – Grouping Reason” (V_T582G) in the IMG:

Personnel Management → Personnel Administration → Customizing Procedures → Settings for Concurrent Employment → Copy Infotypes



- **The IRS Limits are different for different companies, however they are the same for assignments at the same (tax) company.**

Figure 704: Data Sharing: Tax Data Example

Grouping assignments with the same (tax) company together is achieved using the grouping reason "USIT" (US-specifc).

The entry in the last column indicates that no data should be shared before an assignment starts. If the entry is changed to indicate that the system should group before the assignment starts, the following happens:

- The grouping rule cannot determine a valid company before the start of the assignment since there is no infotype 0001 data present at this time. Hence the rule will deliver no grouping value. Since the system needs a value anyway, it uses the earliest value it can determine and assumes that this is the correct value.

If the grouping rule identifies a grouping value before the assignments starts, then the system uses this value. This is the case in the Person ID example.

Benefits Administration & Workbench for CE

Benefits

- Administration Personnel Assignments are grouped together based on the Benefit Area stored in the "General Benefits Information" Infotype.
- Personnel Assignments having the same Benefit Area are grouped together for further processing.
- Only one Personnel Assignment per Group can carry and process Benefit Plan information, the Main Personnel.

Benefits Workbench for Concurrent Employment

- Facilitates the administration of benefits
- Is the single point of entry for Benefits Administration
- Supports the adjustment reasons at person level

The additional Personnel Assignments of the same group are the“Secondary Personnel Assignments”.

They can contribute with parameters such as:

- Work hours
- Salary
- Seniority information

In this way, they influence the processing of the Benefits under the Main Personnel Assignment.

To be able to differentiate between Main Personnel Assignment and Secondary Personnel Assignments, the “General Benefits Information” infotype will be enhanced.

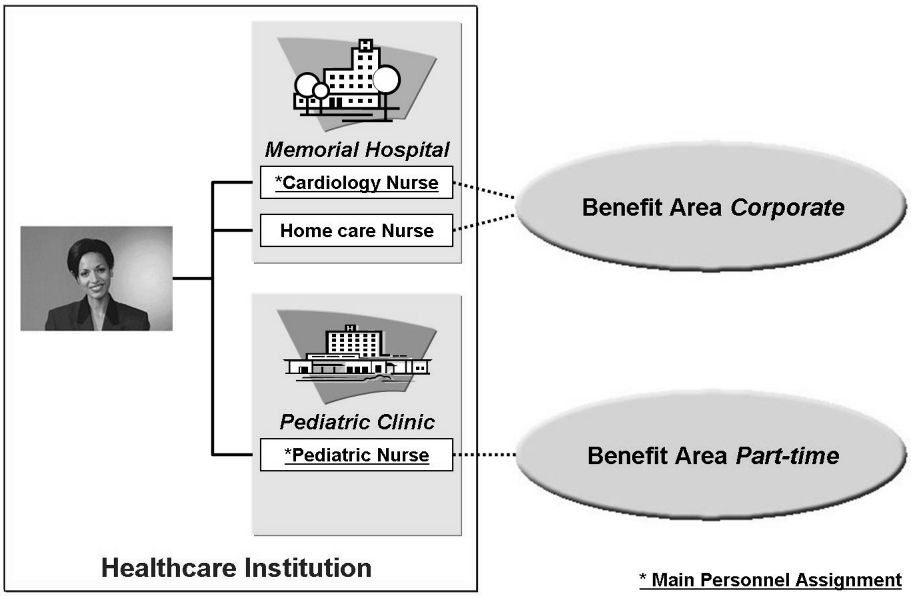


Figure 705: Main Personnel Assignment for Benefits

Usually, each personnel assignment is assigned to one benefit area. Personnel assignments sharing the same benefit area are grouped together for benefits calculation. For each benefit area, an assignment is defined as the main personnel assignment.

The employee can have a set of benefit plans for each benefit area. These plans are held by the main personnel assignment.

Hint: Personnel assignments can belong to the same benefit area only if they belong to the same payroll area.

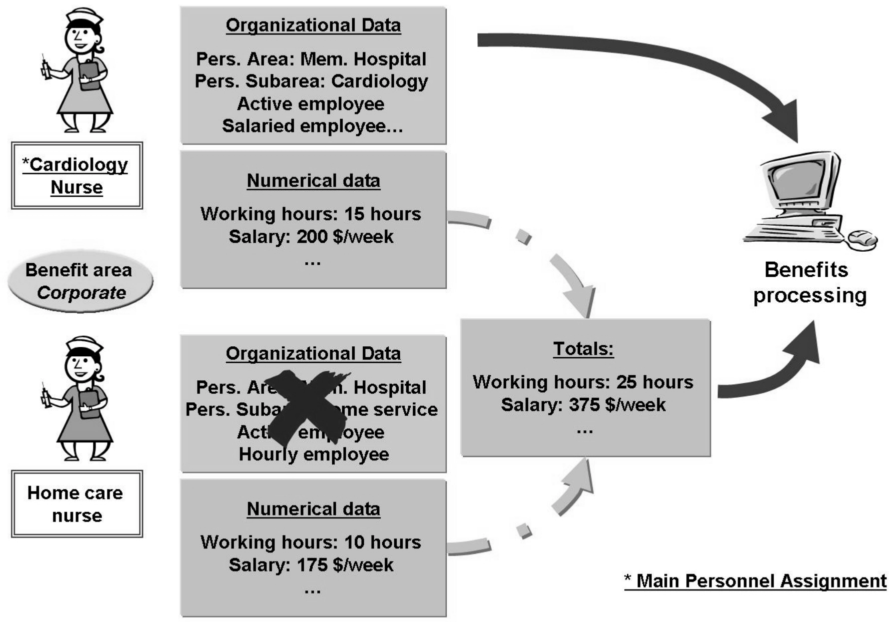


Figure 706: Grouping for Benefits: Consequences

Personnel assignments belonging to the same benefit area are grouped together for benefits. This means that the benefits of two personnel assignments are calculated taking into account data coming from both personnel assignments. Numerical data are summed together and organizational data are taken from the main personnel assignment.

Example:

- For the "Corporate" benefit area, an employee is eligible for a pension plan only if he or she works more than 25 hours a week. The working hours of all personal assignments belonging to the "Corporate" benefit area will be then summed together to determine if the employee is eligible for this plan.
- For the "Corporate" benefit area, only hourly employees are eligible for a given dental plan. If the main personnel assignment for this benefits area is a salaried employee, then the employee will not be eligible for this plan.

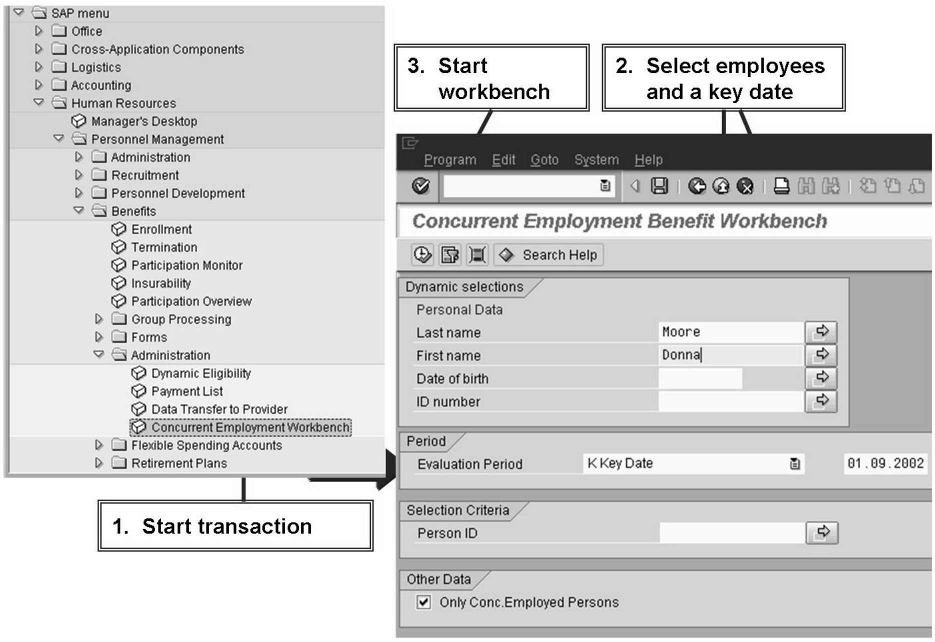


Figure 707: Concurrent Employment Workbench I

To manage concurrent employment situation for benefits, you use the concurrent employment workbench.

Start the workbench from the SAP menu under: *Human Resources → Personnel Management → Benefits → Administration → Concurrent Employment Workbench*

Select the employees you want to process and start the workbench (F8).

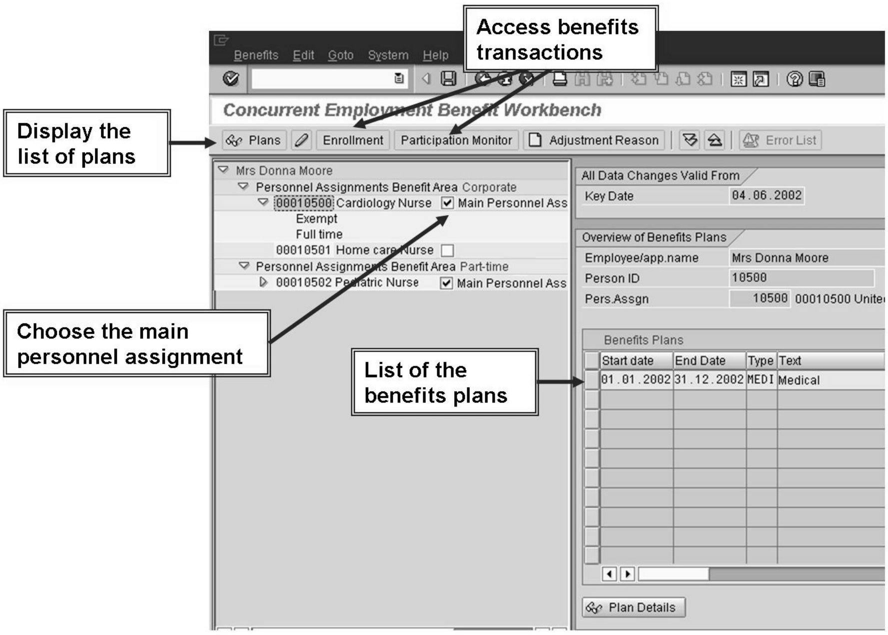


Figure 708: Concurrent Employment Workbench II

With this workbench you can assign multiple personnel assignments to a benefit area. For each benefit area you have to decide which assignment is the main one.

You can display the list of benefits plans for a main personnel assignment.

The workbench allows you to jump to the main benefit transactions.

All changes are made as of the key date. Information before the key date is retained but is delimited.

Example: An employee gets a new assignment. As a consequence of this, the employee should be allowed to change his or her benefits contributions. For this, you select the main personnel assignment and create an adjustment reason. Once the adjustment reason has been created, you can run the enrollment or the participation monitor to perform the necessary adjustments.

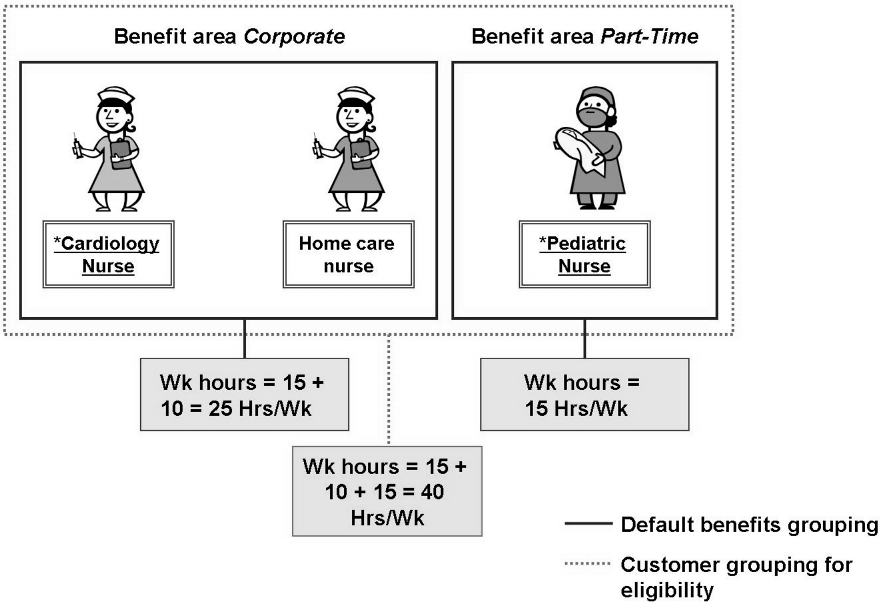


Figure 709: Implementing Your Own Groupings for Benefits

For the benefits processing, personnel assignments belonging to the same benefit area are grouped together. This is the case for eligibility where working hours of personnel assignments belonging to the “Corporate” benefit area are summed together. However, you can deviate from this rule.

For eligibility you might want to consider the working hours of all personnel assignments instead of the working hours of the personnel assignments of the same benefit area.

Example: An employee needs to work at least 30 hours in order to enroll into a Dental plan of the “Corporate” benefit area. In this case, if you do not replace the default grouping for Eligibility, only the working hours of the personnel assignments belonging to the “Corporate” benefit area are included, that is, 15+10 = 25 hours, which is not sufficient to enroll in the plan. If you set up the Eligibility grouping so that all personnel assignments are selected, the Working hours that will be considered will be: 15 + 10 +15 = 40 hours, which is enough to enroll into the Dental plan.

You can deviate from the standard grouping in several places in Benefits:

- Eligibility
- Cost
- Insurance Coverage
- Credit
- Contribution
- Combined Coverage
- Combined Contribution
- Adjustment Authorization
- Pension Plans Evaluation

Time Management

Planned Working Time – Managed at the Personnel Assignment level

- One work schedule (planned working times) at Personnel Assignment level
- Collisions of planned working times can be visualized through Time Manager's Workplace

Time Evaluation – Time evaluation rules can be processed for one personnel assignment or for groups of personnel assignments

- Overtime calculation
- Working time directives can be checked at Person level
- Absence quotas can be generated across multiple personnel assignments
- Verification of maximum leave entitlement across personnel assignments
- Time Evaluation is fully integrated to Payroll processing

With mySAP HCM Time Management in concurrent employment situations, it is possible for the time administrator at the healthcare institution to view Donna's work schedule in one simple report. Additionally, HR personnel at both the Pediatric Clinic and Memorial Hospital can monitor her work independently.

In addition, mySAP ERP 2005 Time Management in concurrent employment situations allows the combining of work schedules under different views. This allows time management administrators to catch any scheduling conflicts and prevent overstaffing. This information empowers administrators to make the right staffing decisions on a case-by-case basis.

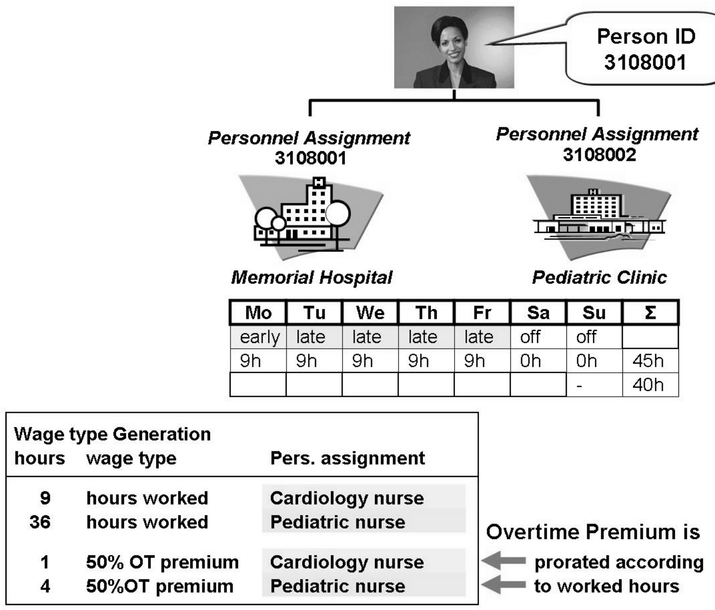


Figure 710: Overtime Rule Applied to Multiple Personnel Assignments

Additionally, mySAP ERP 2005 Time Evaluation is completely integrated with mySAP ERP 2005 Payroll, which considerably simplifies the process of paying employees with multiple personnel assignments.

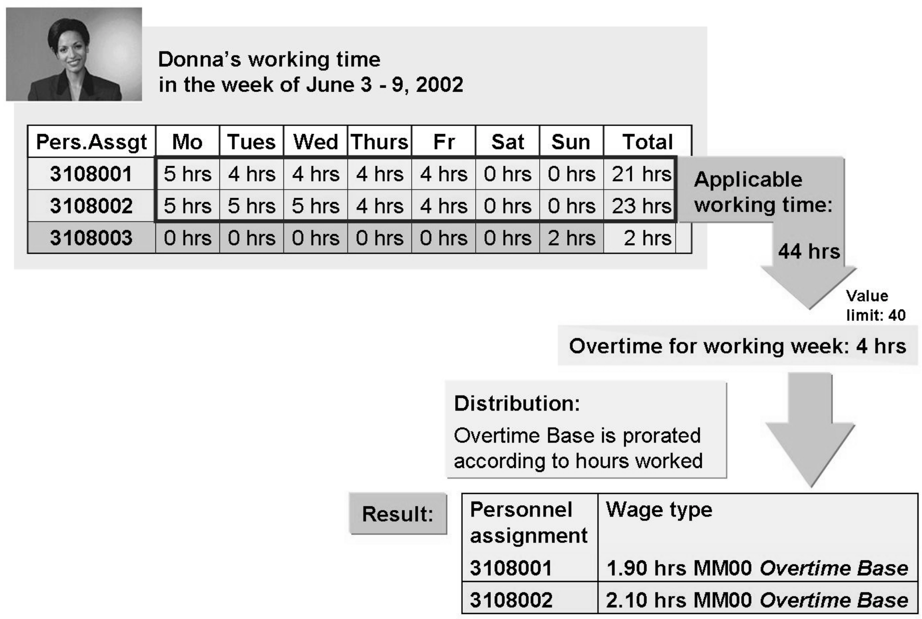


Figure 711: Example: Weekly Overtime Regulation II

Donna's personnel assignments with the Healthcare Institution are analyzed jointly to determine the applicable weekly working time. mySAP ERP 2005 totals the times she worked on these two personnel assignments and compares the total with the joint value limit. The working week must be the same for both personnel assignments.

The wage type resulting from the hours of overtime is distributed over the two personnel assignments she has with the Healthcare Institution. You can use distribution methods to determine how you want it to be distributed.

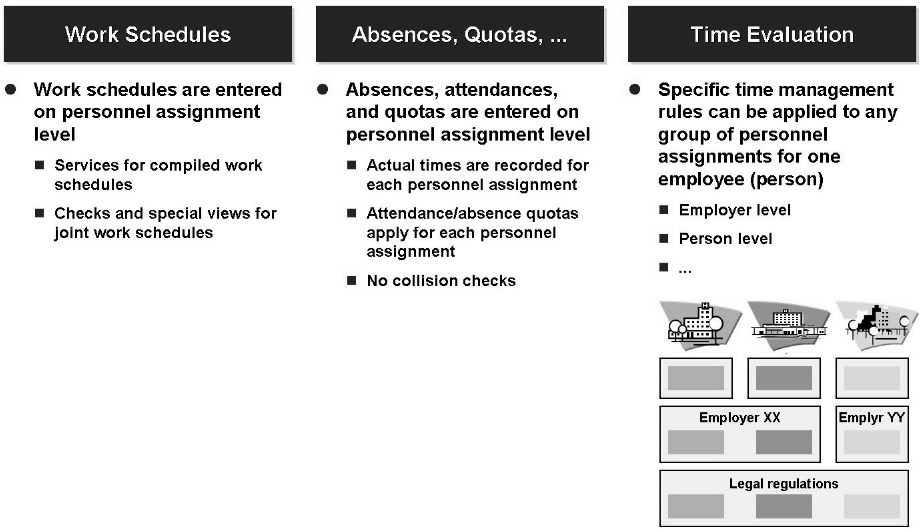


Figure 712: Concurrent Employment with mySAP ERP 2005 Time Management

Time management regulations can be processed over multiple personnel assignments in Time Evaluation only.

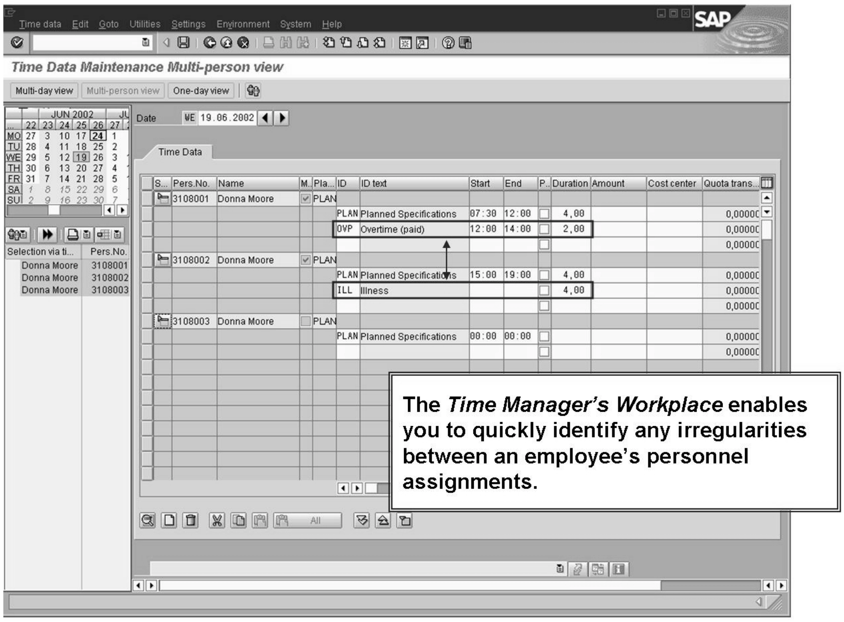


Figure 713: Time Data Administration Using the Time Manager's Workplace

There are currently no functions especially for recording the working times of concurrently employed persons in the Time Manager's Workplace.

You can, however, use the Multi-Person View and the Temporarily Insert Employees function to call up all of an employee's personnel assignments and process the time data jointly.

We recommend you to use the Time Manager's Workplace to administer time data for concurrently-employed persons. The Multi-Person View displays all information relevant to the various work schedules of the concurrently-employed person. This means that you can avoid collisions between work schedules and with the time data in the employee's other personnel assignments.

It is especially useful for identifying irregularities, for example, if an employee has reported sick for one personnel assignment to be able to work overtime for the other personnel assignment.

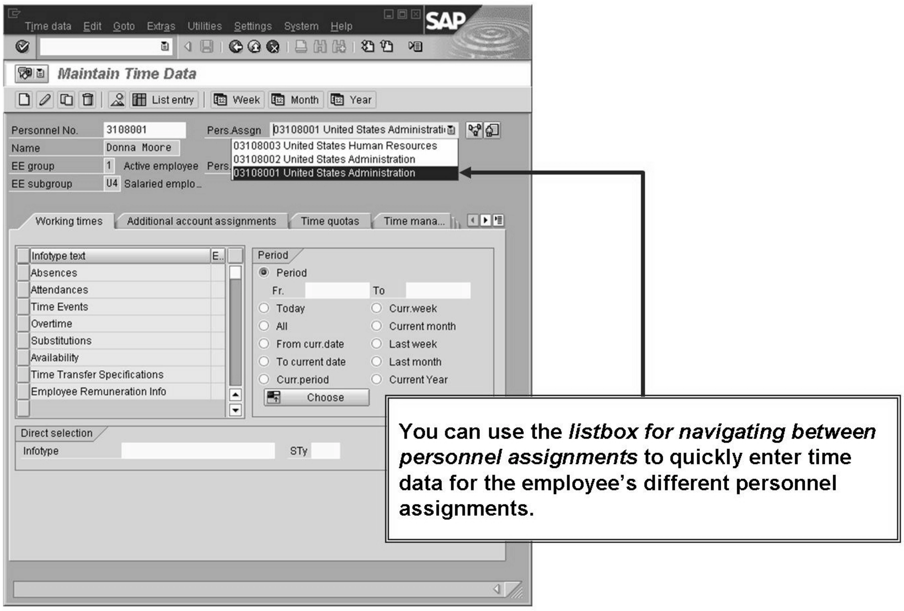


Figure 714: Time Data Administration Using the Maintain Time Data Transaction (PA61)

If you use the *Maintain Time Data* function, the *Pers.Assgn* field and the *listbox for navigating between personnel assignments* show an overview of all of the employee's personnel assignments.

Hint: The *Maintain Time Data* transaction (PA61) is not being developed further. You are therefore advised to use the *Time Manager's Workplace*, which has a considerably more comprehensive range of functions.

Payroll Processing

New payroll process architecture

- Enables you to run payroll for multiple personnel assignments
- Identifies person-related processes
- Includes synchronization mechanism
- Contains a new payroll log

Payroll results and reporting

- New ways to visualize payroll results, at person level or at personnel assignment level
- New logical database enables you to report on the Person or on the personnel assignment

Payroll payment and posting to accounting

- Build a group of personnel assignments for the payroll payment
- Posting on person level or personnel assignment level

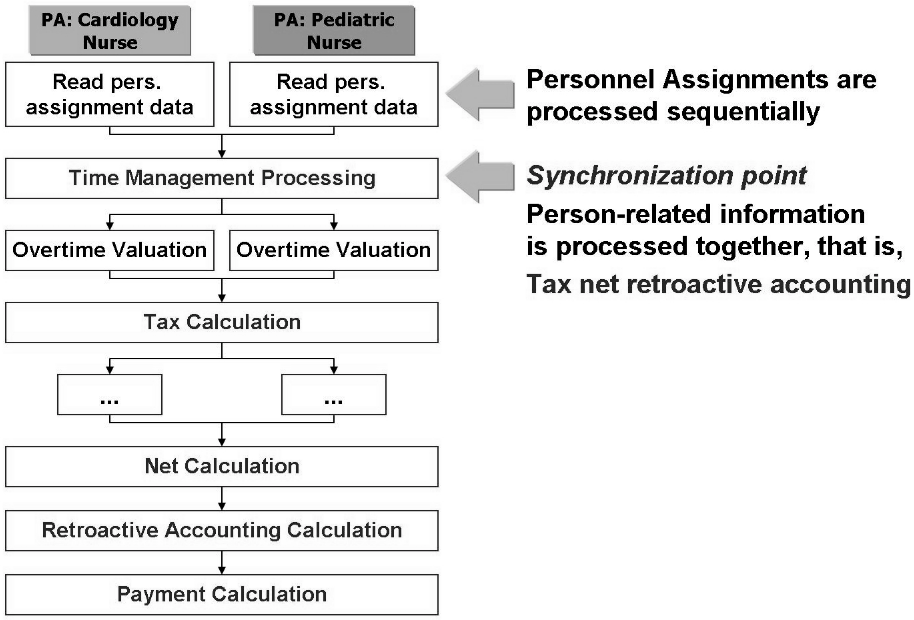


Figure 715: Payroll Process Architecture

In a CE Environment it is often necessary to run payroll simultaneously for each personnel assignment. This is now possible thanks to a new payroll architecture

The parts of the payroll process that are person-related are processed together in a synchronization point. For example, in the chart above, the Tax, Net Calculation, Retroactive Accounting Calculation, and Payment Calculation processes are performed simultaneously at synchronization points

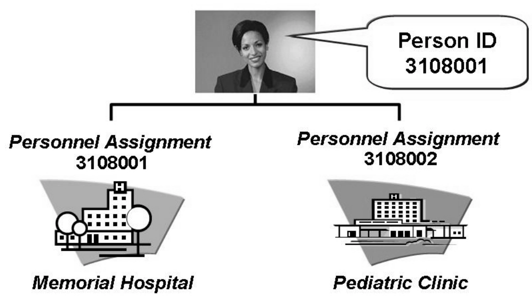
Payroll Result (PR)

Personnel assignment result (PAR)	Personnel assignment result (PAR)	. . .	Person Result (PER)

- **The outcome of a single payroll run is called payroll result (PR).**
- **The outcome of a payroll run for a personnel assignment is called the personnel assignment result (PAR).**
- **The common outcome of a payroll run with multiple personnel assignments is called the person result (PER).**

Figure 716: Payroll Results

The calculation of payroll results for concurrently employed persons depends upon the totals of the individual assignments. To avoid erroneous or redundant payroll results, mySAP ERP 2005 distinguishes among payroll results as shown in the diagram above.



Payment group:

- **One payment, one bank transfer**

Expenses and liabilities can be posted from:

- **Personnel assignment**
- **Group of personnel assignments (person)**

Figure 717: Payment Group and Posting to Accounting

The payroll results contain information that is relevant to the accounting department. For this reason, these results must be forwarded to accounting. The interface between payroll and accounting helps to:

- Group together relevant posting information from the payroll results
- Create summaries of important documents
- Perform the relevant postings in the accounting components, such as the general ledger accounting and cost accounting components

The posting capabilities of mySAP ERP 2005 Payroll can also post expenses and liabilities assigned during payroll to either a personnel assignment or a group of personnel assignments. In the latter case, a main personnel assignment must be defined. This will help to:

- Define the cost assignment for expense postings
- Assign the company code and business area of postings to clearing accounts, both for the payroll and the payment posting
- Derive the paying company code
- Determine the house bank and house bank account used for the payment along with the paying company code

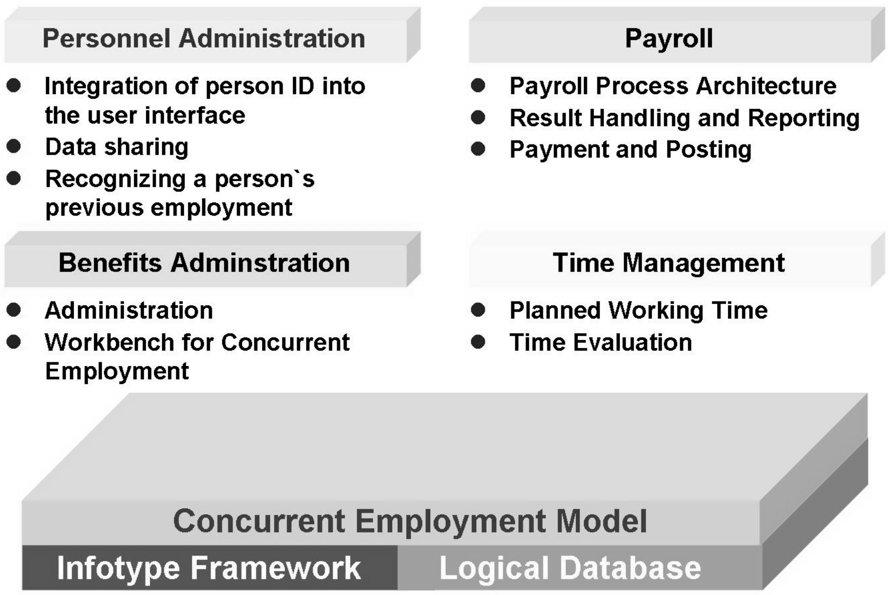


Figure 718: Summary: Concurrent Employment Solution at a Glance

Appendix 3

Case Study: Optional Exercises for Revision

Understand the exercises in this course in context

In our case study, you hire a new employee. The data set up in the course and the corresponding Customizing settings apply to the new employee.

Hint: The case study deliberately does not provide a sample solution, since the aim of it is for you to test your own knowledge. First try to complete the exercises without any additional help. If you have problems, refer to the relevant unit for reference. Try to work out the solutions for yourself. If you are still having difficulties, your instructor will of course be willing to help.

Hint: The instructor will activate the **table lock** for the Case Study. This may cause a dialog box to be displayed when you want to access certain settings informing you that the data is currently being edited by another user. If this happens, wait until the user has finished making the settings, and try again.

1. Hiring a New Employee

Access the *Time Recording Mini-Master* hiring action (in transaction PA40). Enter the following data in the individual infotypes in the action, paying heed to the default values for planned working time from the SCHKZ and TMSTA features.

Personnel Number:	306995## (## = your group number)
Set to:	1st April of the current year
Action:	Time recording mini-master Org.

assignment:	Personnel area = CABB / subarea = TP## / EE group = 1 / subgroup = X1
Personal Data:	Enter data of your choice
Position:	No assignment
Planned Working Time:	Use the schedule you created (WP##, AZ##) (Time Management status = 0)
Time Recording Information:	Skip without saving

2. Creating Quotas

Manually create quotas of type 30+##, standard annual leave, and 70+##, special leave, for the employee for the current year. (Alternatively, you can use the RPTQTA00 report.)

Your employee was not hired until the second quarter of this year. You must therefore reduce the quota by a quarter.

Check whether the system proposes this reduction correctly. Check the employee's quotas in the quota overview (PT50).

If you notice any errors, use the RPTQUOTA_CHECK report to check your Customizing settings for this personnel number.

3. Checking the Employee's Working Times

Check your employee's working times again by using the "personal work schedule" (in transaction PA61). Is the work schedule assigned correctly?

4. Entering Absences and Checking the Deduction

Enter absences for your employee that are deducted from your quotas, 30+## and 70+##. We defined the absence type LE## for this purpose in the exercises.

Create substitutions, availability duties, and overtime.

Pay attention to how the system handles collisions.

Check the quota deduction. You can use quota overview (transaction PT50) or reports such as RPTQTA10.

5. TMW Calendar View

Have a look at the settings in the TMW calendar view.

Check the absences and the work schedule in the appropriate view. If required, maintain other data in the TMW calendar view, as suggested in task 9 of the exercises for unit 10.

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Feedback

SAP AG has made every effort in the preparation of this course to ensure the accuracy and completeness of the materials. If you have any corrections or suggestions for improvement, please record them in the appropriate place in the course evaluation.